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STUDIES IN RICKETS IN THE CAPE PENINSULA

III. RICKETS OF LATE ONSET ASSOCIATED WITH RENAL TUBULAR DYSFUNCTION

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In 1931 Fanconi[1] first suggested that rickets might be associated with dysfunction of the renal tubules, when he published a report of a child suffering from glycosuria and proteinuria in addition to rickets. In 1935 Lightwood[2] described nephrocalcinosis in 6 children with similar clinical features, and in 1936 Butler *et al.*[3] described the abnormal serum biochemistry which occurred in this syndrome and labelled it briefly 'hyperchloraemic acidosis'. This syndrome is frequently referred to as 'renal tubular acidosis' (RTA). Vitamin-D-resistant rickets is a third syndrome in which rickets is probably associated with renal dysfunction.

All these conditions are familial (RTA less commonly) and are associated with dwarfism. The rickets occurs over the age of 3 years, when ordinary vitamin-D-lack rickets is rare. We have recently had the opportunity of studying 8 patients with these syndromes, and are reporting the clinical and biochemical findings and the results of therapy in 5 of them.

FANCONI SYNDROME WITH CYSTINOSIS

Cases 1 and 2

In October 1958, D.A., a Coloured child, aged 5½ years, was admitted to an orthopaedic hospital with deformities of the lower limbs. Radiographs at this time demonstrated active rickets (Fig. 1A). His urine contained a trace of protein, but no sugar. Serum alkaline phosphatase was elevated, although inorganic phosphorus and blood urea were normal (Table I). An elder sister, M.A., aged 11, had had an osteotomy 5 years previously because of bent legs, and her urine had contained protein at that time. The parents and 4 other siblings were said to be normal, and this was later confirmed by us.

D.A. was treated with large doses of vitamin D (100,000 units daily), and showed radiological evidence of healing over 5 months (Fig. 1B). The serum calcium was not elevated and remained normal. An osteotomy was performed to correct the lower-limb deformity and he returned to his family. Unfortunately, he received no further treatment, and 2 years later he again showed clinical, biochemical and radiological evidence of rickets (Table I and Fig. 1C). He was now aged 7½ years and only 3 feet 2 inches tall (Fig. 2). He had complained of severe photophobia during this period. The urine contained protein and sugar, and cystine crystals were present in his corneae.

In 1960 his elder sister M.A. was sent to us from an orthopaedic hospital because of leg deformities and persistent proteinuria. She was then aged 13, and 4 feet tall, and her only complaint was of mild photophobia. Radiographs demonstrated active rickets (mild) and this was confirmed biochemically (Table I). Other electrolytes and CO_2-combining power were normal, but her blood urea was elevated (64 mg. per 100 ml.) and her creatinine clearance was depressed (60·9 ml. per minute). The urine contained protein, and a general increase of all the amino acids, but no sugar. There were numerous cystine crystals in the bone marrow. These were also seen in her cloudy corneae by slit-lamp examination or by ophthalmoscopy, using a +40 lens. There was no steatorrhoea. Vitamin D was commenced on 12 September 1960, 400,000 units being given daily by injection. Radiological healing and improved tubular re-absorption of phosphorus (Table II) were evident 1 month later.

FANCONI SYNDROME WITHOUT APPARENT CYSTINOSIS

Case 3

A.W., a European boy aged 7½ years, was 3 feet 4 inches tall and lack of stature was his main complaint. A younger brother, aged 4½ years, was already taller. His mother had noticed polyuria and excessive fluid intake for many years, and said that he had suffered from intermittent attacks of muscular weakness on 3 or 4 occasions, each lasting 6 - 8 hours, during which he was unable to move.

There was no mental impairment or photophobia. Apart

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TABLE I. SERUM BIOCHEMISTRY

Patient	Na	Cl	K	CO_2	Ca	P	Alkaline phosphatase	Urea
D.A. 1958					9·6	4·0	29	
D.A. 1960 (cystinosis)	135	104		19·6	9·3	2·5	51·1	35
M.A. (cystinosis)		104	3·8	21		2·8	47	64
A.W. (Fanconi syndrome)	140	104	3·6	12·5 (28)	8·6	2·9	32	90
S.S. 1956	137	113	2·1	16.9 (38)	8·2	3·3		38
S.S. 1957	137	120	3·7	11.6 (26)	9·6	3·7	12·6	27
S.S. 1960 (RTA)	136	117	3·0	14·7 (33)	8·8	2·8	29·3	27

Units: Na, mEq./l.; Cl, mEq./l.; K, mEq./l.; CO_2, mEq./l., figures in brackets—volumes %; Ca, mg. per 100 ml.; P, mg. per 100 ml.; alkaline phosphatase, Shinowara-Bodansky; and urea, mg. per 100 ml.

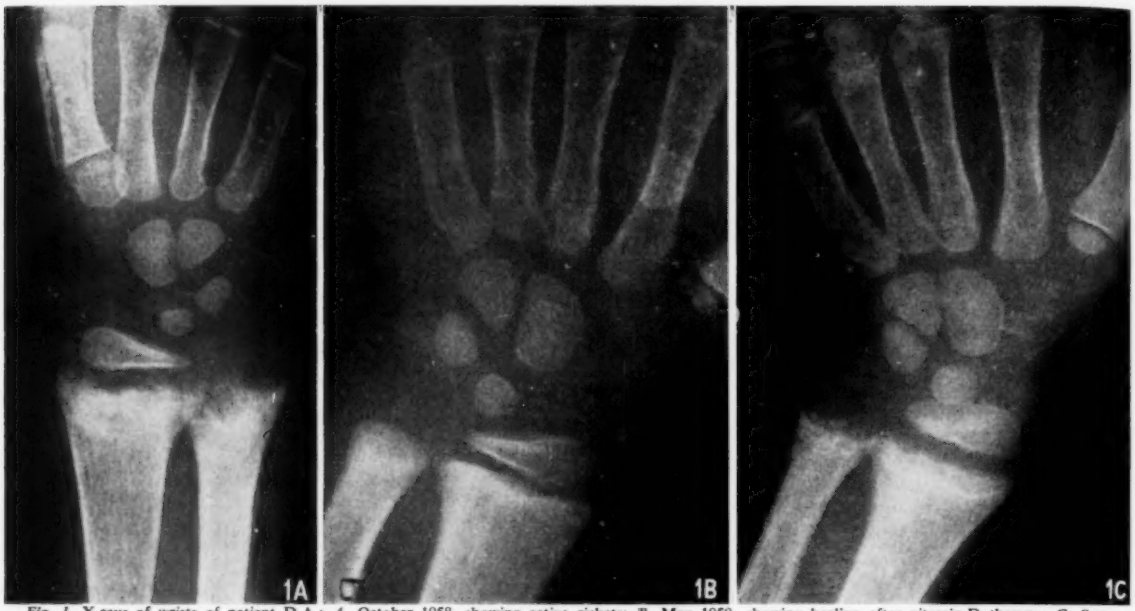

Fig. 1. X-rays of wrists of patient D.A.: *A.* October 1958, showing active rickets: *B.* May 1959, showing healing after vitamin-D therapy; *C.* September 1960, showing recurrence of active rickets — no vitamin-D therapy since May 1959.

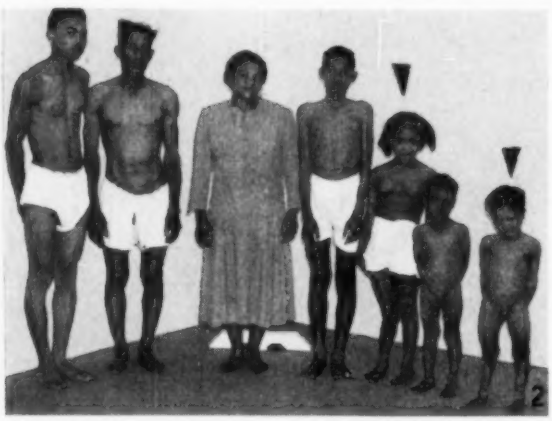

Fig. 2. Family with cystinosis. Patients M.A. and D.A. (indicated by arrows) with parents and 3 normal siblings.

from genu valgum, there was no abnormality on physical examination. There were no cystine crystals in the corneae or the bone marrow.

Active rickets was evident radiologically (Fig. 3A), and his bone age was 3 years. There was no renal calcification. He had glycosuria and proteinuria and there was a general increase in amino-acid excretion. During hospitalization he frequently had a urinary volume above 50 oz. daily — the maximum output was 64 oz. daily. Urine concentration was only 1007 after a 12-hour fast. His biochemistry was typical of active rickets (Table I). The serum-sodium, serum-chloride and serum-potassium levels were normal, but he was markedly acidotic. The renal tubular re-absorption of phosphorus was impaired (Table II).

Daily treatment with calciferol, 400,000 units, and an alkalinizing mixture containing 5 G. of sodium citrate and an equal amount of sodium bicarbonate in 50 ml. of water, was given. The CO_2-combining power remained low (12·5 mEq./l. for the first 2 days, but 4 days after treatment began it was within the normal range — 22·5 mEq./l.). After 5 days on 400,000 units of calciferol daily, the dose was halved and he received

Fig. 3. X-rays of knees of patient A.W.: *A.* Active rickets; *B.* Healing 1 month after vitamin-D therapy.

TABLE II. TUBULAR RE-ABSORPTION OF PHOSPHORUS

Patient		GFR	Fp	UVp	Tp	Phosphorus re-absorbed %
M.A. (Fanconi syndrome)	before treatment	29·9	·78	·43	·35	44·9
	before treatment	28·1	·83	·39	·44	52·9
	after vitamin-D treatment	15·4	·77	·30	·48	61·7
	after vitamin-D treatment	17·5	·92	·33	·59	64·6
A.W. (Fanconi syndrome)	before treatment	6·8	·19	·137	·06	30
	after vitamin-D treatment	9·0	·54	·29	·24	46·1
	after vitamin-D treatment	10·1	·56	·31	·24	43·8
J.D. (vitamin-D-resistant rickets)	before treatment	27	·71	·38	·33	46
	before treatment	22	·63	·27	·36	57
	before treatment	22	·59	·33	·26	44
	after vitimin-D treatment	26·8	1·74	·31	1·43	82
	after vitimin-D treatment	28	1·64	·24	1·4	85
S.S. (RTA)	before treatment	20·6	·72	·41	·30	42·4
	before treatment	20·0	·64	·37	·27	41·9
	after treatment with citrate	35·6	1·7	·46	1·3	73·7
	after treatment with citrate	33·8	1·5	·44	1·1	70·2

GFR = glomerular filtration rate (ml./min.) (from endogenous creatinine clearance); Fp = filtered phosphorus (mg./min.); UVp = urinary phosphorus (mg./min); Tp = tubular re-absorption of phosphorus (mg./min.).

between 200,000 and 300,000 units daily for 1 month without any toxic effects. The serum phosphorus returned to normal 3 weeks after treatment began. Radiological healing was evident after 1 month (Fig. 3B) and the renal tubular re-absorption of phosphorus improved (Table II).

RENAL TUBULAR ACIDOSIS (HYPERCHLORAEMIC ACIDOSIS WITH NEPHROCALCINOSIS)

Case 4

S.S., a Coloured girl, aged 4½ years, was first seen in 1956, when she weighed 12 lb. 4 oz. and was 2 feet 4 inches tall. Since the age of 7 months she had failed to thrive, and she had never walked. Polyuria and polydipsia were prominent (she frequently drank 20 oz. in 15 minutes). There were 8 healthy siblings, none of whom had skeletal or renal disease.

She had gross rickets clinically, biochemically and radiologically. There was no evidence of cystine deposition in the tissues, but she had quite marked nephrocalcinosis (Fig. 4A). In addition she had biochemical evidence of hyperchloraemic acidosis (Table I), but was not uraemic. There was mild proteinuria, but no glycosuria or aminoaciduria. Her urinary citrate was 30 mg. per day (normal is over 200 mg. per day). Urinary pH varied between 6·8 and 8·0, and after an ammonium-chloride load corresponding to 0·3 G. per kg., the lowest figure obtained was 6·5 (Table III).

Shortly after therapy with an alkalinizing mixture and potassium (5 G. of potassium citrate with 5 G. of sodium citrate and 5 G. of citric acid daily) her acidosis and hypokalaemia were corrected and the CO_2-combining power was maintained between 50 and 60 volumes %. She was given 1 ml. 'ostelin forte' (Glaxo) intramuscularly (= 600,000 units of vitamin D), and 2 months later her rickets had healed.

One year later (1957) she was re-admitted with hyperchloraemic acidosis (Table I), but without radiological evidence of rickets. She had not had treatment for 8 months. On re-instituting therapy with citrate mixtures, the serum biochemistry returned to normal. However, she again failed to take any therapy for the 18 months up to October 1960, when she was next seen. Now aged 8½, she was still only 3 feet 1 inch tall and had gross limb deformities (Fig. 5). There was biochemical and radiological evidence of recurrence of rickets, as well as hyperchloraemic acidosis and increased nephrocalcinosis and lithiasis (Fig. 4B and Table I). She was treated with citrate mixture alone in the same dose as previously. The electrolyte abnormality and acidosis were corrected, but after 3 months the rickets had become worse, so she received, in addition, 2 ml. ostelin forte in 2 separate doses (= 1,200,000 units of vitamin D). Radiological and biochemical evidence of healing rickets was present 1 month later.

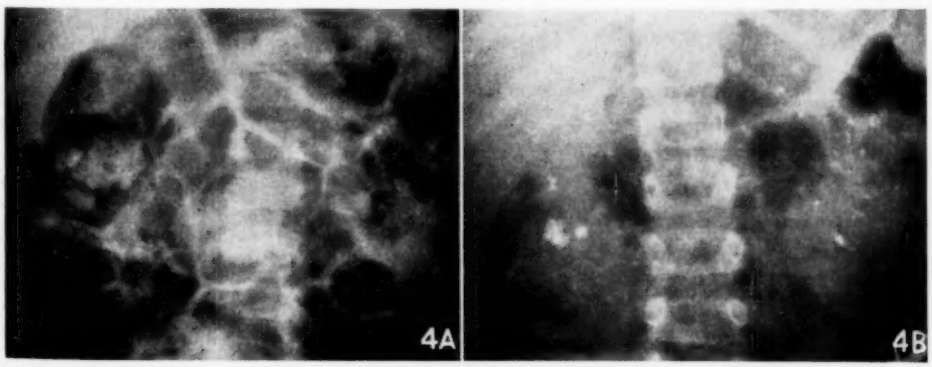

Fig. 4. X-rays of abdomen of patient S.S.: *A.* 1956, showing renal calculi;; *B.* 1960, showing increased calcification.

VITAMIN-D-RESISTANT RICKETS

*Case 5**

J.D., a Coloured male, aged 11 years, was the eldest child in a family of 4 bow-legged children first seen in January 1958 (Fig. 6). There was biochemical and radiological evidence

* Reported in greater detail elsewhere.[12]

TABLE III. ACID-LOAD RESPONSE* (PATIENT S.S.—RTA)

	Period (hours)	Urine: Volume (ml.)	Urine: Ammonia (mEq./min.)	Urine: Titratable acidity (mEq./min.)	Urine: pH	Blood: Cl (mEq./l.)	Blood: HCO_3 (mEq./l.)
	1	70	14	4·7	6·9	109	13·0
Acid load	2	50	10·5	3·75	6·8		
	3	106	14·5	17·7	6·9		
	4	40	7·6	5·5	6·9	111	8·5
	5	190	28·5	21·1	6·6		
	6	172	31·0	27·0	6·6		
	7	100	20·8	10·4	6·5		

* Short-term acid-load response:[10]
Hourly urine collections are made, and 3·5 G. of ammonium chloride are given after period 2.
Normal range[10] 2 - 8 hours after acid load as follows (in mEq./min.):

	Ammonia	Titratable acidity
Normal	33 - 75	24 - 51
RTA	10 - 44	4 - 18

Fig. 5. Patient S.S. in 1960, aged 8½ years (scale in feet).

of rickets in all the children, and their mother had had an osteotomy as a child because of bent legs. There was no glycosuria, proteinuria, amino-aciduria or polyuria, and no evidence of cystine deposition. The renal tubular re-absorption of phosphorus was deficient (Table II) and the gastro-intestinal absorption of calcium was impaired.

Both these defects were improved by large doses of vitamin D (1 million units daily for 1 week; 400,000 units daily for 2 weeks; and a maintenance dose of 200,000 units of calciferol daily for 4 weeks). The rickets healed, and bilateral osteotomies were then performed by Dr. H. Bell to correct the deformities. The patient returned home in August 1958 on the inadequate dose of 1,600 units of calciferol daily. By December 1958 the serum alkaline phosphatase had risen from 10 units (in August) to 25 units, but we found no other biochemical or radiological abnormality.

Fig. 6. Family with vitamin-D-resistant rickets.

DISCUSSION

Aetiology

Renal Tubular Acidosis

During normal body metabolism an excess of hydrogen ion is produced, and this must be excreted in the urine against a high gradient. (The average maximal gradient of hydrogen ion between urine and plasma is 800 to 1, corresponding to a urinary pH of 4·6.) The hydrogen ion is eliminated either as free hydrogen ion (measured as urinary titratable acidity) or combined with ammonia. In renal tubular acidosis there is an inability to eliminate hydrogen ions against the plasma/urine gradient. This is demonstrated by inadequate urinary acidification following an acid load (usually given as ammonium chloride, 0·1 G. per kilo, after which the pH should fall well below 5).

The maintenance of the plasma/urine gradient involves enzyme systems, and the basic defect in RTA is probably an enzyme dysfunction or lack. A research stimulus was provided when 'diamox', a carbonic anhydrase inhibitor, was observed to produce hyperchloraemic acidosis. Numerous attempts have been made to demonstrate carbonic-anhydrase deficiency in RTA. However, diamox administration to these patients further increases bicarbonate excretion, implying that further inhibition of carbonic anhydrase has occurred.[4-6]

Jaffe *et al.*[7] demonstrated normal carbonic-anhydrase activity in renal tubular tissue removed at biopsy. They also demonstrated that the activity of triphosphopyridine nucleotide (TPN) diaphorase was abnormally low. This enzyme is active in the tricarboxylic-acid cycle, the integrity of which may be necessary to provide the intracellular energy for maintaining the high plasma/urine hydrogen-ion gradient. Recently, Huth *et al.*,[8] using a 'clearing index' of hydrogen ions, have demonstrated latent RTA in apparently unaffected members of a family in whom 1 sibling had the typical syndrome.

The aetiology of the rickets in this syndrome has not been satisfactorily explained. In our patient (S.S.) there appeared to be a deficient tubular re-absorption of phosphorus, which improved after citrate therapy (Table II). This might have been expected to lead to healing of rickets, but there was no radiological evidence of healing after 3 months.

The cause of the nephrocalcinosis has recently been related to an abnormality in citrate metabolism which occurs in this condition.[9] Low citrate concentration tends to facilitate calcium precipitation which is enhanced in alkaline or near-alkaline media. The citrate excretion in RTA is low, as we observed in S.S.

Fanconi Syndrome and Vitamin-D-resistant Rickets

The mechanism of the biochemical disturbance in vitamin-D-resistant rickets and Fanconi's syndrome is also obscure, but presumably based on enzyme dysfunction. In addition to a defect in tubular re-absorption of phosphorus,[10] an impaired gastro-intestinal absorption of calcium has been demonstrated in both these conditions.[11,12] In vitamin-D-resistant rickets this has been considered to be the main defect by some workers, the phosphaturia being secondary to hyperparathyroidism resulting from deficient calcium absorption.[13,14] In Fanconi's syndrome there is an impaired renal tubular re-absorption of sugar and amino acids in addition to phosphorus. It is also possible that many patients with the Fanconi syndrome have primary defects in the glomeruli as well as in the tubules.[15] The relation of cystine deposition to the tubular defect is obscure. A so-called 'swan-neck' anatomical deformity of the renal tubules has been described in cystinosis.[16]

Inheritance

All 3 of these conditions are genetic. Vitamin-D-resistant rickets is inherited as a sex-linked dominant, and Fanconi's syndrome as an autosomal recessive. Inheritance of RTA, at one time considered to be rare, now appears to occur fairly frequently.[8] This inherited predisposition makes a congenital enzymatic deficiency more probable than a deficiency secondary to some other process (e.g. renal infection).

Diagnosis, Therapy and Prognosis

These 3 syndromes can be distinguished by simple investigations (Tables IV and V). Rickets over the age of 2 years must always suggest a renal aetiology. When present, cystine crystals can easily be visualized in the cornea using a +40 lens.[17] (Not all patients with the Fanconi syndrome have cystinosis, but its presence is diagnostic.) Proteinuria may occur in both the Fanconi syndrome and RTA, but glycosuria and aminoaciduria occur only in the Fanconi syndrome. Nephrocalcinosis occurs only in RTA, and is present in 70% of cases.[18] Defective renal acidification and systemic acidosis are always present in RTA, but both these abnormalities may be present in Fanconi's syndrome.

TABLE IV. A COMPARISON OF THE 3 SYNDROMES OF RENAL TUBULAR DYSFUNCTION

	RTA	*Fanconi*	*Vit.-D-resistant rickets*
Rickets	50%	Most	All
Nephrocalcinosis	70%	—	—
Cystinosis	—	±	—
Glycosuria	—	+	—
Acidosis	+	±	—
Defective urinary acidification	+	±	—
Aminoaciduria	—	+	—
Hypopotassaemia	45%	±	—
Hyperchloraemia	+	—	—
Decreased gastro-intestinal absorption of calcium	?	Present	Present
Prognosis	Good (if treated)	Poor. Death at puberty, usually in uraemia	Good (even if untreated, life span probably normal)
Treatment	Alkalinizing mixtures. Small doses of vitamin D. Potassium	Large doses of vitamin D. Potassium	Large doses of vitamin D
Inheritance	Rarely obviously familial	Autosomal recessive	Sex-linked dominant

TABLE V. A COMPARISON OF THE 3 SYNDROMES OF RENAL TUBULAR DYSFUNCTION ACCORDING TO THE DEFECT PRESENT

Anatomical and physiological defect	*Important results*
1. Vitamin-D-resistant rickets:	
Diminished proximal tubular re-absorption of phosphorus	Low-phosphate rickets only
Deficient intestinal absorption of calcium and phosphorus	Low-phosphate rickets only
2. Renal tubular acidosis (hyperchloraemic acidosis):	
Inability to acidify urine (? exact mechanism)	Low-phosphate rickets; Hypokalaemia; Metabolic acidosis
3. Fanconi syndrome:	
Swan-neck proximal tubule deformity with diminished re-absorption of phosphorus, glucose, amino acids, water	Low-phosphate rickets
Frequent inability to acidify urine	Hypokalaemia
Later glomerular damage	Metabolic acidosis
Organ cystinosis (not in the 'adult form')	'Diabetes insipidus'; Photophobia; Uraemia and death

Hypopotassaemia may also occur in both conditions, but hyperchloraemia only occurs in RTA.

RTA is treated by means of alkalinizing mixtures and, in addition, potassium supplements if necessary. These must be administered for the remainder of the patient's life. Both healing of rickets and diminution of nephrocalcinosis have been reported on this therapy.[19,20] If the patient discontinues treatment (as in S.S.) rickets recurs, nephrocalcinosis increases and uraemia results. One hesitates to use vitamin D in the presence of nephrocalcinosis, but we were unable to observe any healing in S.S. after 3 months on citrate mixtures and therefore had to do so. We did not employ the massive doses necessary to effect healing in Fanconi and vitamin-D-resistant rickets. Orthopaedic correction of deformities will be necessary later.

Both in Fanconi's syndrome and vitamin-D-resistant rickets, high dosage of vitamin D is necessary to produce healing (in one case up to 1 million units daily). In addition, alkalis and potassium supplementation may be necessary in the Fanconi syndrome depending on the biochemical abnormalities. Although the therapeutic dose of vitamin D is high, the toxic dose remains similar to that in normal subjects, so that careful control is necessary when massive doses are used. Relapse of the rickets occurs if therapy is discontinued (as in D.A.), so that vitamin D must either be given continuously in smaller doses, e.g. 50,000 units daily, or in intermittent courses using high doses. In addition to increasing the tubular re-absorption of phosphorus in Fanconi's syndrome, vitamin-D therapy may cause diminution in glycosuria and aminoaciduria.[21,22]

The prognosis of these 3 conditions differs. In spite of adequate therapy all that can be achieved in Fanconi's syndrome (with or without cystinosis) is healing of rickets and correction of acidosis and hypopotassaemia. The children usually die of uraemia at puberty. Provided that therapy with alkalinizing mixtures is commenced early enough, before irreparable renal damage has ensued, patients with renal tubular acidosis can probably live a normal life span. Patients with vitamin-D-resistant rickets may survive to adulthood, even without treatment. There is no evidence that their life span is shortened.

SUMMARY*

We have discussed the case histories of 5 children suffering from rickets of late onset associated with renal tubular dysfunction. Fanconi's syndrome (with or without cystinosis), renal tubular acidosis (RTA), and vitamin-D-resistant rickets are all distinct syndromes. Nephrocalcinosis occurs only with RTA; the mode of inheritance, the prognosis and the treatment differ in the 3 conditions. There are, however, certain features common to 2 or all of them, notably systemic acidosis and failure to acidify the urine, which may occur in both Fanconi's syndrome and RTA; a defect in the gastro-intestinal absorption of calcium present in Fanconi's syndrome and vitamin-D-resistant rickets; and a low-phosphorus rickets with a diminished tubular re-absorption of phosphorus occurring in all 3. A better understanding of the association between these conditions must await elucidation of the basic enzyme defects, which are probably responsible for the disordered renal tubular and gastro-intestinal function.

* This paper is presented mainly as a brief clinical account of the conditions described and does not attempt to enter into the complicated biochemical difficulties (e.g. cause of hypercalciuria, serum amino acids, parathyroid hyperplasia etc.). We have wittingly oversimplified the matter herein.

We should like to thank Prof. F. Ford for enabling us to investigate most of these patients; S.S. was originally investigated by Dr. B. Zilberg. We thank Prof. J. Kench and the Department of Clinical Pathology, Miss M. Lloyd and Mrs. E. King for biochemical estimations; Mrs. E. Orkin for preparing the manuscript, and Mr. B. Todt for the photographs.

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ADDENDUM

Methods

Biochemical methods used were those reported previously by us [Jackson and Dancaster (1959): J. Clin. Endocr., 19, 658]. The phosphorus re-absorption was estimated from timed urinary collections with midway serum determinations, using endogenous creatinine clearance as a measure of the glomerular filtration rate. Phosphate intakes and times of day were kept near-constant.

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EDITORIAL : VAN DIE REDAKSIE

THE BENEVOLENT FUND

In view of the fact that we are fast nearing the end of the year — traditionally a time of goodwill and benevolence — it will be fitting once again to draw the attention of members to one of the special services rendered by the Medical Association: the organization and administration of the Benevolent Fund.

The Benevolent Fund of the Medical Association was established some years ago with the object of providing a trust fund in order to help necessitous widows and dependants of medical practitioners. It was envisaged that a considerable amount of money would be raised which could be invested; the interest on this money (and such other additional sums as the Association may decide on) would then be used to pay grants to deserving cases of dependants of doctors who have been left without a means of livelihood.

The Fund is at present being administered on the following lines: The capital of the Fund is invested, and the interest on this money plus an amount slightly larger than the amount of the interest (in terms of a recent decision by the Federal Council), from the contributions made to the Fund in the course of every year, are used to pay grants to the beneficiaries of the Fund. Grants are made by the Head Office and Journal Committee of the Federal Council, each recommendation being carefully scrutinized. Although the dependants of deceased members of the Association are given preference, help is sometimes afforded to the dependants of those who were not members of the Association.

In order to be able to help as many dependants as possible, it is necessary that the capital amount of the Fund be built up continuously. The four main sources of income of the Fund are:

1. *Donations.* Persons or groups contribute to the Fund from time to time. No contribution is too small to be welcome; here as everywhere it is true that every little helps. During the past few years it has become customary for Branches to make special efforts to contribute considerable amounts of money to the Benevolent Fund. These efforts by the Branches are usually organized by special local committees on which the wives of doctors and other interested persons serve. In this way it has been possible for some Branches to contribute an amount of R1,600 or more to the Fund. The Southern Transvaal Branch has, on more than one occasion, contributed the generous amount of R5,000.

2. Contributions to the Fund are sometimes made *in memoriam*, i.e. in lieu of wreaths or other tributes. In such instances a suitably worded votive card is sent to the next-of-kin by the Association on behalf of the donor. Contributions of this kind are now being used for a special educational fund for doctors' dependants.

3. Contributions are often made to the Fund *for services rendered* by one practitioner to another. In this case an acknowledgement card is sent to the doctor who has rendered the service, indicating that his assistance has been appreciated.

4. Bequests are always welcome as an additional source of income to the Fund.

Recently a new method was tried to increase the income of this Fund. On the initiative of Mrs. Gétaz, a member of the Association of Medical Women of the Natal Coastal Branch of the Medical Association, an opportunity was created to collect a considerable amount of money for the Benevolent Fund. The Standard Triumph Co. Ltd. presented a Triumph Herald Coupè motor as a prize in a competition. The competition was organized on a national scale by the advertising firm Lindsay Smithers (Pty.) Ltd.

Unfortunately the results of this undertaking were disappointing. The final amount of money collected is not available yet, but it will be considerably less than was expected. It seems that it was a mistake to limit the period for the fund-collecting too drastically — it would probably have been wise to have extended it over the Christmas season.

In addition to what was done, a more intensive personal appeal to individual doctors in the various Branches should have been made. If every doctor had taken one whole book of tickets, a much larger amount would have been collected.

Nevertheless, our experience in this regard can still be utilized by concentrating on an individual appeal. This could, for instance, be done by requesting every member of the Association to add a contribution of one or two rand for the Benevolent Fund as a routine when paying his members' subscription at the beginning of every year.

The Benevolent Fund has been well known to a large number of members of the Association who, in the past, made regular donations and other contributions; but there are still many members who are unaware of the existence of the Fund. It is realized that if the attention of members is directed to the Fund, it will result in increased opportunity for assistance by the Association to those who are in urgent need of help. For this purpose a special booklet resembling a cheque book has been prepared. By filling in a form in this booklet a prospective contributor can indicate whether he wishes to make a contribution 'for services rendered' or 'in memoriam', or whether he desires to bequeathe a legacy to the Benevolent Fund. It may be advisable to keep this booklet, which can be obtained from the Secretary of the Association, P.O. Box 643, Cape Town, in a drawer of a desk so that it may be available whenever it is needed to help others through the medium of the Benevolent Fund of the Association.

We should like to appeal urgently to all individual members of the Association and to all Branches and Divisions to do everything in their power to support this Fund. Many near relatives of deceased doctors are in dire

need of help. Their need is so great that the Committee which has been entrusted with the administration of the Fund, often does not know how to discharge its responsibilities. By cooperating in building up the Benevolent Fund of the Association into as strong a Fund as possible, we will be taking advantage of the opportunity to make a worthy and noble gesture to the memory of our deceased colleagues.

VERBOD OP DIE LEES VAN 'N BEKENDE STANDAARDWERK

Tot nog betreklik onlangs was die opvatting taamlik algemeen gangbaar dat daar oor geslagsake maar liewer geswyg moet word, en dat veral jeugdiges (insluitende alle ongetroudes) versigtig beskerm moet word teen die ‚minder aangename' werklikhede van die lewe. Danksy die lewenswerk van iemand soos Havelock Ellis en die ‚deurbraak' van Freud (of ons nou ook al met sy teorieë saamstem of nie), het dinge in hierdie opsig nou egter tog so verander dat belangrike geslagsake op 'n verantwoordelike manier vryelik bespreek kan word. Onderwerpe wat vroeër as taboe en verbode beskou is, maar belangrik is en in die individuele en openbare belang bespreek behoort te word, word nou só bespreek. Voorbeelde hiervan is probleme soos wanaanpassing in die huwelik, geslagsvoorligting, gesinsbeplanning, ens. Die belangstelling in hierdie onderwerpe gaan egter verder as net bespreking — die afgelope aantal jare het byvoorbeeld die ontstaan gesien van sulke nuttige en belangrike instellings soos huweliksvoorligtingburo's, professionele geslagsvoorligtingdienste aan ons skole, en klinieke vir verwagtende en nieverwagtende moeders waar die metodes van geboortebeperking en gesinsbeheer beskikbaar gestel word.

In sommige opsigte het daar dus vordering gekom. Maar, in ander opsigte is ons idees nog net so verstar en ons gemoedere nog net so geslote soos ooit tevore. 'n Voorbeeld hiervan is die probleem van homoseksualiteit en die baie newe-probleme wat daarmee saamhang.

Om die een of ander onverklaarbare rede bestaan daar nog 'n wydverspreide vooroordeel en 'n byna aggressiewe weerstand teen almal en alles wat die homoseksuele ‚etiket' dra, en probleme in hierdie verband word nog benader op die vlak van oningeligte en onkundige afkering. Om aan te toon hoe diep die wortel van die kwaad in hierdie verband lê, moet ons tot ons professionele verleentheid en wetenskaplike ontsteltenis daarop wys dat 'n bekende standaardwerk oor homoseksualiteit, wat in 1955 deur 'n Engelse psigiater geskryf en gepubliseer is, so pas in Suid-Afrika in die ban gedoen is.[1]

Kragtens die verbodsartikel word verklaar dat *Homosexuality* (Pelican Book No. A 477) deur dr. D. J. West (wat 'n voltydse hospitaal-psigiater is en Assistent-Redakteur van die *International Journal of Social Psychiatry*), onbetaamlik, onwelvoeglik, of aanstootlik is, en dat dit ingevolge sekere subartikels van die doeanewet nie in die Republiek ingevoer of besit mag word nie, op die gevaar af van 'n skuldigbevinding wat strafbaar is met 'n boete van tweeduisend rand, of 'n gevangenisstraf van hoogstens vyf jaar, of met sowel die boete as die gevangenisstraf.

As amptelike, wetenskaplike orgaan van die Mediese Vereniging van Suid-Afrika haas ons ons om daarop te wys dat daar in hierdie geval 'n ernstige mistasting begaan is. Ons is sedert die eerste verskyning in 1955 deeglik met hierdie boek bekend. Dit is een van die beste boeke in sy soort — 'n ‚voorbeeldige', gebalanseerde, en wetenskaplike opsomming van 'n probleemgesteldheid wat taamlik algemeen voorkom. Die objektiewe manier waarop dit die moeilike probleme in hierdie verband benader, het al veel daartoe bygedra om die geluk en welsyn te bevorder van baie mense wat direk of indirek met hierdie probleem gemoeid is. Seer sekerlik is daar hoegenaamd niks in die hele trant van die boek wat onbetaamlik, onwelvoeglik of aanstootlik is nie, en die gesindheid waarmee die boek geskryf is, is onbesproke.

Die doel van die skrywer was om die moeilike en ingewikkelde probleme in hierdie verband kalm en sonder vooroordeel te bespreek teen die agtergrond van ons moderne wetenskaplike kennis van die saak. Die boek bevat 'n opsomming van homoseksuele gedrag in primitiewe gemeenskappe en in historiese tye, en dit lei tot 'n omvattende beskrywing van die maatskaplike, geregtelike, en morele probleme, soos hulle te voorskyn tree in verskillende lande. In die oorsig van die oorsake van hierdie toestand, word die endokriene, biologiese, en psigoanalitiese teorieë almal bespreek, en die vraag word behandel of daar 'n moontlike verband tussen homoseksuele gedrag en ander afwykings, soos alkoholisme en psigopatie, bestaan.

Die feit dat hierdie standaardwerk wat in 1955 uitgegee is, nou as 'n Pelican-uitgawe verskyn het, beteken nie dat dit skielik pornografies geword het nie. Dit beteken maar net dat die Pelican-uitgewers, soos die uitgewers van ander soortgelyke boekreekse, dit moontlik gemaak het dat 'n boek met 'n wetenskaplike inslag, wat alreeds die professionele goedkeuring van deskundiges verkry het, nou ook beskikbaar gestel kan word om gelees te word deur 'n breëre lesersbevolking. Omdat die probleme wat in verband staan met die homoseksuele gesteldheid so 'n wye omvang aanneem, behoort 'n boek met 'n objektiewe benadering en wat met so 'n onbetwyfelbare goeie gesindheid geskryf is, juis deur soveel mense as moontlik gelees te word. Wat eintlik behoort te gebeur is dat die owerhede 'n paar keer tweeduisend rand beskikbaar moet stel om hierdie boek te help versprei; ook behoort tronkstraf van vyf jaar opgelê te word op enige geneesheer, maatskaplike werker, onderwyser, of enigiemand anders wat belas is met die opvoeding van jongmense en die voorligting van volwassenes, wat *nie* hierdie boek of 'n soortgelyke objektiewe opsomming van die onderhawige probleem bestudeer het nie!

Om af te sluit wil ons graag die volgende sê: Dit val nie binne ons bevoegdheid om te oordeel of leesstof snert of pornografie is en as sodanig as verbode leesstof verklaar behoort te word nie. Eintlik wil ons ons hoegenaamd nie inlaat met die moeilike probleem van die plaas van 'n verbod op die lees van ‚ongewenste' boeke nie. Wat ons egter wel voel, is dat dit vir ons almal as beskaafde mense tot skade en skande strek dat 'n aanvaarde standaardwerk — wat deur sy invloed al grootliks daartoe bygedra

het om menslike leed te versag en geluk en welsyn te bevorder — dat so 'n werk verbied moet word. Hierdie soort fout behoort *nie* te kan plaasvind nie. Sou die komitee wat belas is met die keuring van boeke dit nie as beginsel kon aanvaar om in gevalle soos hierdie ten minste eers die raad en advies van 'n deskundige op die betrokke gebied te soek nie — veral aangesien dit tog duidelik aangedui word dat die boek deur 'n professionele wetenskaplike geskryf is? So 'n prosedure sou ons vrywaar teen die soort verleentheid waaraan ons nou blootgestel is.

1. Staatskoerant, p. 20, 27 Oktober 1961. Pretoria.

ACCOUNTS

It is of considerable importance that practitioners should render accounts to persons to whom the Tariff of Fees for Approved Medical Aid Societies is applicable in a suitably detailed manner. It will facilitate the assessment of claims and lead to prompter payment. Considering that for most societies a separate claim form need not be completed, account forms should be of a reasonable size that will allow the details to be set out clearly.

The details required are:

(*a*) Member's name, initials and number (if known) and, when applicable, dependant's name and relationship.

(*b*) Home address and business address (this applies particularly to societies or organizations with branches all over the country).

(*c*) Nature of complaint.

(*d*) Dates of attendances and injections, etc., plus cost of material for injections.

(*e*) Nature of operation (if any).

(*f*) Time occupied by operation or anaesthetic.

(*g*) Names of assistant(s) and anaesthetist.

(*h*) To or by whom referred.

(*i*) Appropriate tariff section and item number.

It is advisable to render accounts monthly whenever possible, because it will encourage members of medical aid societies to submit their claims promptly and within the prescribed time laid down by their respective societies.

One further observation should be made. Practitioners should make sure of the correct name of a society, especially if they wish to advise a society that an account has not yet been paid.

Accounts have been sent to the wrong society and even the wrong claim forms have been used. For example, in the printing industry there are ten societies connected to newspaper offices, while the Printing Industry Medical Aid Society exists for the members of the South African Typographical Union (the works' employees) and the Federation of Master Printers Medical Aid Society for the office staffs of a number of printing firms. Confusion has occurred, particularly in connection with the last-mentioned two societies, causing unnecessary delay in the settlement of claims.

ALCOHOLISM IN GENERAL PRACTICE

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After 2 years of registrarship at a psychiatric hospital (Tara Hospital, Johannesburg) I returned to general practice, confining myself almost exclusively to psychiatry, and soon found myself seeing an ever-increasing number of alcoholics. This involved overcoming a deep-seated prejudice, unfortunately shared by most colleagues, including some psychiatrists. As the number of my alcoholic patients increased, my prejudice diminished (or was it the other way about?). I found this work gratifying in all respects, for the recovering alcoholic is a good patient, a devoted husband and a conscientious worker.

In the 4 years preceding 1959 I saw 475 alcoholics in Johannesburg, and the following is an attempt to review the subject and to give an account of alcoholism as I saw it clinically. For the purpose of this article I chose the following definition: 'Alcoholism is a periodic, progressive disease, severely affecting the total personality, body and mind, characterized by addiction to alcohol and attended by failure at home, at work and socially'. Addiction is determined by its cardinal feature, viz. mental and physical suffering on withdrawal of the drug (the withdrawal syndrome).

CLINICAL FEATURES

'He was not merely addicted to drink, he was dejectedly chained to it, as the great sheepish dog whom he resembled might be chained to a kennel. He did not drink at parties, or with friends, but in no company but his own, in solitary, irregular and frequent bouts; sometimes every week, sometimes at intervals of several months, sometimes every day for a month.'

From *Charmed Lives* by Nadine Gordimer.

The onset of alcoholism varies enormously, some patients becoming compulsive drinkers from the beginning of their use of alcohol, the true or *primary addicts;* others after long association, after many years of so-called social drinking, the *secondary addicts*.[1] Clinically, all patients go through 2 main stages, the early pre-alcoholic stage and the fully developed crucial stage.

Months or years before control is lost alcoholics show a pattern of drinking that differs from ordinary drinking in several respects. To an extent and for some time they may appear to exercise control, confining their drinking to hours after work and to weekends. However, alcohol with them is a need rather than a pleasure, and they are preoccupied with it, one drink always calls for more and often leads to intoxication; they have a high tolerance for alcohol, boasting hard heads for drink and usually experiencing no hangover.

The patient may insist on calling himself a 'social drinker', but the drink itself is the attraction, not the social occasion at which it is served. Severe damage to the

sufferer, to his family and to his career results, even during this stage. Devoid of insight and enslaved by the inexorable need for alcohol, he refuses to accept his drinking as a problem, minimizing it and using all manner of rationalization and 'proof' that he is not an alcoholic because he 'can lay off' for months and because he is fit for work in the morning. He may admit that drink is doing him harm, but he will obstinately turn down offers of help. The few patients who accepted treatment at this stage did relatively well.

Established Alcoholism

Sooner or later drinking intensifies, 'one or two' have to be taken at lunch time, and weekend drinking becomes a minor bout that goes on into Monday. A memory blackout, where part of the day is a complete blank, may frighten the patient into his doctor's consulting rooms. This stage marks a definite breakdown. Loss of control is intermittent, but remissions result from the periodic nature of the condition rather than the patient's ability to exercise control. In advanced cases tolerance drops, and the patient becomes drunk and incapable on much less alcohol than formerly. The alcoholic now drinks alone, at short intervals throughout the day, and protects his supply. With the bottle at hand he is a slow drinker, but after an interval of hours he may swallow several ounces to gain relief.

The Classical Bout

The tendency at this stage for drinking to mount and culminate into the classical bout is characteristic, and over 80% of my patients were seen in this state. It was impossible for them to remain without drink for more than brief intervals without experiencing intense physical discomfort and mental suffering. This suffering on withdrawal of alcohol during the bout is the cardinal feature of alcoholic, or for that matter any drug, addiction, hence the urgency and the need for a 'curer' ('regmaker') in the morning, the resistance to removal to hospital, the great fear of being left without drink, the resentment of criticism and offers of help and the irresponsible, psychopathic behaviour. Running short of supply, the bout-bound alcoholic will lie, borrow, sell his belongings, and pay any price for his greatest, his only need.

Accompanying the discomfort there may be restlessness, irritability, fright, psychomotor agitation, tension, distressing tremors, insomnia and palpitations, all immediately relieved by alcohol, but aggravated by it ultimately. At the height of the bout the alcoholic drinks because he has to, not to overcome his social inadequacy or as an escape from intolerable life situations, not even to achieve oblivion for its own sake, but because to stop drinking is to suffer. This goes on for days or weeks without food or natural sleep, until, unable to stop and too ill to continue, he reaches the peak of his agony, when he appeals for help and is only too glad to receive it.

Asked what he is complaining of he can only describe the feeling as 'terrible', 'rotten' or 'butterflies in the stomach'. Other symptoms are not uncommon, e.g. biliousness, diarrhoea, frightening dreams, convulsions, and defective judgment, memory and concentration. If death does not supervene the bout comes to an end because the patient is too ill and bilious to drink more, or it terminates by lack of supply or hospitalization. In any event, the dreaded withdrawal symptoms will be experienced.

Remission

Whether the patient undergoes treatment or 'sweats it out', termination of the attack and remission will be marked by complete relaxation, restoration of sleep and appetite and by relief from craving for drink within a few days, although mental symptoms may take weeks to clear up. Some patients, discharged from hospital too soon, may go on 'nibbling at it' and seem able to take 2 or 3 drinks daily between the attacks. Again I believe this to be due to the periodicity of alcoholism, for within days or weeks drinking mounts and becomes uncontrollable again. This stage is so marked by absence of symptoms or need for alcohol that the patient tends to become over-optimistic. His post-alcoholic remorse is followed by assurance that drink 'never enters his mind', which is true, and that he will never need it again, which is far from true. Some patients go through a period of depression, apparently endogenous in those who are prone to depression, or related to the thought of having to give up a long-standing habit, or caused by the depressive effect of alcohol on the brain. Others experience a feeling of apathy and a void in place of the long drinking hours of the past.

However, as surely as the pain of the peptic ulcer or the attack of asthma returns, so does the need for alcohol in the alcoholic. Few describe it as a craving, though once drinking is resumed craving may become intense. In some it is triggered off by inimical life situations from which they apparently escape into the carefree oblivion produced by alcohol. Others make use of minor daily setbacks to explain away their return to drink. Nevertheless, I have no doubt in my mind that, whatever the original cause of this disease, once alcoholism is established the need to go back to the bottle arises irrespective of any life situations. In many cases the occasion is one of joy or a feeling of elation (a party in the office or a successful business deal). The spouse will often deny the story of a setback, or even reveal that drinking preceded it. I have seen many patients go through trying and unhappy events during their remission without resort to drink, only to start drinking at some later date for no reason at all, and the frank patient admits this.

Alcoholics Anonymous often stress, and rightly so, the danger of the first drink ('there is only one drink between me and a drunk', 'one drink is too many and a whole bottle not enough'). In many this is literally the case, others drink moderately for days before control is lost.

'Dry Drunk'

The phenomenon of 'dry drunk' deserves mention. Alcoholics Anonymous (AA) use the term for members who achieve sobriety, but remain restless and without peace of mind. Clinically, one or more of the following symptoms are experienced during the 'dry' period preceding a bout, symptoms accompanied by a feeling that only alcohol will give relief: irritability, restlessness, depression, mounting tension, sleeplessness, bodily pains. Patients sometimes describe it as "a feeling like 'flu" or a hangover, although no alcohol was taken for months. This syndrome, I feel, represents an attack in the 'dry' alcoholic undergoing treatment or receiving AA support. Its recognition and handling should help to ward off an attack, and a number of my patients with severe symptoms were actually admitted to a nursing home for a few days until the symptoms subsided.

Periodicity

Appreciation of the periodicity of alcoholism is important to patient and doctor alike. The patient learns that remissions support the diagnosis of alcoholism rather than disprove it, and that he cannot claim credit for them unless they are increased by treatment. The doctor regards recurrence as he would a relapse of depression. He is able to discharge the patient safely when the attack is over and to assess response to therapy by the increase of the period of remission. Lack of appreciation of the periodicity is often responsible for the patient's drinking the day he leaves hospital, because of either premature discharge or unnecessarily prolonged retention with consequent loss of work and resentment.

Jellinek,[2] stating that the term dipsomania is no longer used in North America, nevertheless described periodic

bouts as a feature of late alcoholism.

One patient showed me a 12 months' chart for 1958 kept by his methodical wife, who marked every drinking day of the year. It showed 13 drinking attacks, of 2 - 5 days each, and bore a striking resemblance to a menstrual chart. This patient did well, but during January, February and April 1959 he had 'dry drunk' attacks that disappeared eventually. Knowledge of the periodic nature of alcoholism and of these attacks helped this patient to combat alcoholism.

Chronic Alcoholism

Histories and follow-up of cases suggest that the condition is slowly progressive, attacks tending to become longer, more frequent and more severe in their effects, with tolerance for alcohol dropping. Physical and mental sequels, reversible during earlier remissions, eventually leave permanent damage. The term *chronic alcoholism* is reserved here for these complications: Korsakoff and Wernicke's syndromes, polyneuritis and liver disease, and the commoner and frequently overlooked brain damage short of frank psychosis. All aspects of mind are badly hit: affective (anxiety, depression), cognitive (memory, comprehension, judgment), and conative (striving, will power). Hence the frequency of suicide, the lack of will power to recover, the deterioration of the personality and the poor prognosis in advanced cases.

AETIOLOGY

This is at present controversial and our knowledge of it incomplete. Writers speak of multiple factors: psychological, physiological, socio-cultural, and hereditary, and alcoholism has been stated to be symptomatic of or secondary to psychotic disease.

Psychological theories relate alcoholism to abnormal early childhood relationships with parents leading to insecurity in the child. It has been described as a psychoneurosis of introversion,[3] the introvert drinking to overcome his social inadequacy, and as a form of regression to infantile lower levels of immaturity with lessened responsibility, and of dependency. Psychoanalytic theories include self-destructive urges, repressed homosexuality, and oral fixation, which is said to result from psychological trauma, such as deprivation of a significant emotional relationship, occurring during the earliest stage of psychosexual development, at a time when security and release from tension is achieved through the oral cavity. It is supposed to be a perversion, the alcoholic like the infant seeking gratification through ingestion, leading to oblivion, symbolically the blissful infantile state.

Physiological theories include allergic, nutritional, glandular, and metabolic causes. Williams,[4] basing his theories on laboratory studies, suggested that the need to consume alcohol is mediated by regulatory nervous structures situated in the hypothalamus. Figures for the incidence of hereditary factors vary. Jellinek[5] put it at 35%, adding that what is inherited is a constitution that does not offer sufficient resistance to the social risks of inebriety.

Alcoholism in Countries and Races

Alcoholism is said to differ aetiologically from country to country and from one ethnic group to another. In Anglo-Saxon countries psychological factors are believed to play the greater part. In France, where economic factors favour large consumption, there is a general rejection of the idea that alcoholism is related to psychological maladjustment.[6] Investigations carried out in an Aleutian community[7] and the Bolivian Comba[8] have shown that, in spite of heavy and extended drinking by some and frequent drinking by all, no cases of alcoholism were observed. The prevalence of alcoholism among the Irish is related to the tendency to use alcohol as a social lubricant and for business transactions,[9] and the low rates among Jews to ritual orientation in the use of alcohol and the strong disapproval of drunkenness.[10]

Attempts to describe an alcoholic personality have failed. Dependency and schizoid features are common, but they characterize other clinical groups and personality constellations. Landis[11] stated that there is no grouping of personality traits which truly characterizes any considerable number of alcoholics.

Observation of cases in a multiracial South African community showed that clinical types and aetiological factors varied from individual to individual rather than from one social or ethnic group to another. The greater proportion of my patients were South African Whites of British and Afrikaner origin, immigrants from the British Isles, and Jews, but a small number of alcoholics were seen from each of the following countries: Holland, France, Norway, the USA, Italy, Greece, Germany, Yugoslavia and Portugal. Yet all showed the characteristic clinical features, in spite of the absence of uniform social and cultural patterns in South Africa, each of the above national groups following patterns of their own countries of origin.

I did not find alcoholism among Jews as rare as reputed. I saw 25 patients (5·2%) in a city where the Jewish population is 15% of the total European population. Altogether, I saw 157 female alcoholics, a male : female ratio of 2 : 1, and only 5 (1%) non-Europeans, all brandy drinkers of the higher income group — a rarity among the Bantu. This is no indication of the incidence of alcoholism in these Africans, who often drink kaffir beer and pepped-up 'skokiaan', and end up in mental hospitals with toxic psychosis.

Other Aetiological Factors

I could find very little evidence in support of some statements made in current literature on alcoholism: that it is frequently a symptom of mental disease; that it is associated with homicide and sex crimes; that it is common in barmen and infrequent in women; and that most alcoholics are psychopaths. In this series only 7 (1·4%) were psychotics, and 2 patients had criminal records. This is supported by an investigation at Sing-Sing prison showing no greater homicidal tendencies among inebriate criminals than among non-inebriates. I have come across no sex crimes or any other major crime among my alcoholics. I saw 7 alcoholic barmen, but at least 5 of them chose this occupation because they were alcoholics to begin with.

There were 29 psychopaths (6%) among my patients. This diagnosis of a definite abnormal personality was made on the constellation of the characteristic features observed during the period of remission: immature, self-centred, disregarding feelings and rights of others, unable to conform to social standards, irresponsible and lacking restraint, unable to profit by experience.

TREATMENT

The Acute Phase

Before the management of the problem as a whole can be undertaken, the acute phase (the drinking bout) must be terminated ('drying out'). Admission to hospital is essential in all but the few cooperative patients with good home conditions. The art of treating the drinking alcoholic is the art of handling an unwilling patient who resents interference with his greatest need. The approach and attitude of the practitioner to the patient and his problem may make or mar good rapport and success.

Pleading, reasoning, warnings and threats are a sheer waste of time. An active attitude, empathy and the ability to listen without contradicting will win the day. Resistance, usually from fear of withdrawal from alcohol, should be met with action rather than argument. The patient will seldom refuse a pill or an injection and, if he is put to sleep and an ambulance is ordered, will be grateful and full of remorse when he wakes up in hospital. If ill enough he will readily accept treatment. If he flatly refuses all help he may accept it at a later date.

Depending on the severity of the withdrawal symptoms, I keep my patients asleep for 12 - 48 hours and thereafter

tranquillized until tension, tremors and other symptoms abate, the principle being that of the therapy of withdrawal of any drug addiction, viz. withdrawal with substitute therapy.[13] Tapering off with alcohol is inadvisable, since the patient should reconcile himself to the idea that alcohol must never be taken again. Paraldehyde by mouth is still the most rapid and effective hypnotic. Godfrey *et al.*[14] disapproved of it because it prolongs the period of withdrawal. This was true in about 5% of my patients, who continued to crave for paraldehyde as they did for alcohol. However, these patients, observed during several admissions, proved to be extremely difficult to 'dry-out' with any treatment. The difficulty was not with the drug, but with the patient, who felt relaxed, but clamoured for sleep and oblivion — the blissful infantile state. Paraldehyde is followed by chlorpromazine, 'serpasil', barbiturates, meprobamate and other tranquillizers, so that no drug is used for more than a day or two. The dosage varies greatly from one patient to another. Very ill and comatose patients are given intravenous saline and glucose with large doses of vitamins.

Within 3 - 10 days the average patient is over the attack and fit for work. Patients in the pre-alcoholic or early crucial stage may 'dry out' while ambulant, with sedation, while severely ill patients with complications may take many weeks to recover. For reasons already mentioned it is important to recognize the termination of the attack. The relaxed, feeding, sleeping, smiling patient off all drugs should be distinguished from the restless, grumpy alcoholic requesting his discharge. Institutional treatment and prolonged isolation is necessary for the *habitué*, the 'chronic alcoholic', and for the psychopath, to protect themselves and others. Here a good case can be made for compulsory treatment as proposed by the Medico-Legal Society of Toronto.

The Dry Alcoholic

Since alcoholism cannot be cured in the sense that the alcoholic can become an ordinary drinker again, the objects of therapy are: (*i*) To cut down, ease and shorten the attacks and lengthen the period of remission, ideally to last indefinitely; (*ii*) marital, vocational and social rehabilitation; and (*iii*) psychological improvement — to gain insight and ego-strength and to grow up emotionally.

Achievement of these aims will depend on: the patient's constitutional endowment, his intelligence, his psychological health, the extent of damage already done by alcohol to the brain, his wife and environment, his willingness to recover, and the amount of effort his doctor is prepared to make. Every person concerned (patient, spouse, relative, employer, AA sponsor) is seen and heard, all forming a team led by the doctor. Immediate problems may have to be dealt with while the patient is still in hospital. His wife may have walked out on him or he may have failed to go to work. Prompt action will save both his marriage and job. A full history is taken, a psychiatric and physical assessment made, and an eclectic therapeutic plan offered to him. This includes knowledge of the subject of alcoholism, environmental handling, marriage counselling, individual and group psychotherapy, and chemotherapy.

The clinical facts are best imparted in group discussions and the following are some of the points that should emerge: alcoholism is a progressive, pernicious disease; although it cannot be cured it can be overcome and recovery is compatible with normal life; if drinking is resumed it sooner or later becomes uncontrollable; it is almost impossible to recover without help; and surrender is essential for recovery. The patient must admit alcoholism and accept treatment.

The fallacy of the 'curer' or 'regmaker' (the hair of the dog that bit you) should be pointed out: that although the immediate effect of alcohol is to relieve symptoms — sleeplessness, depression, tension, bodily pains — it was the original cause of them and will eventually aggravate them.

Environmental Handling

This amounts to social work which, in private practice, must be done by the practitioner himself. Here again active interest rather than perfunctory advice is the keynote: introducing the patient to veteran AA members, personal contact with employer and family, and checking on progress with social and occupational outlets. Marriage counselling and treatment of alcoholism are interdependent, the former promoting sobriety and the latter saving the marriage.

Situations and relationships that form stumbling blocks to recovery must be looked for in cases where no recovery takes place in spite of apparent cooperation on the part of the patient. These usually involve what, for lack of a better term, might be called reciprocal dependence on each other's failings. Examples are: the wife who condones the patient's drinking while he overlooks her love affair; one alcoholic marrying another; the patient who drinks with his employer, etc. Far from these being 'intolerable life situations' that lead to drink, alcoholics conveniently manoeuvre themselves into such situations to perpetuate their drinking.

Group Activities

These are of great value, particularly for the lonely, the unmarried, the aloof and the withdrawn. I have conducted groups of 8 - 15 such patients discussing the problem, to initiate integration before introducing them to more lasting AA groups. Alcoholics Anonymous are a loose fellowship of alcoholics who meet in groups with 'an honest desire to quit drinking', giving each other support in their efforts to remain sober. Their value lies in the following:

(*i*) *Group therapy* with the therapeutic value of the group situation and relationship. As in any other group members 'speak the same language', and feel accepted, understood and protected against the outside world. They re-establish social contacts, learn to speak in public and feel better for their mental catharsis.

(*ii*) *'Twelve-stepping'*. As explained in their twelfth step, this is the art of carrying the message to the new 'recruit'. The 'sponsor' who adopts him as his 'baby' introduces him to the group and guides him towards integration.

(*iii*) *The religious aspect of AA*, its permissiveness, simplicity, and lack of ritual, appeals to most members who are asked to surrender to a Higher Power as they understand Him.

(*iv*) *The family group*, which is the meeting ground of the families of members, where they learn to understand the problem and benefit from the group situation.

Other Therapy

Individual psychotherapy with a view to gaining insight, ego-strength, and growth towards maturity, is beneficial to some alcoholics and essential for others, but few will accept it or can afford the luxury of prolonged therapy.

Chemotherapy is of limited value. Prescribing disulfiram indiscriminately and relying on it in all cases proves disappointing. Patients take it for days or weeks, as long as their period of remission lasts, discontinue, wait 3 days, and start drinking. I have therefore used it as a deterrent in a limited number of patients: those who had to return to work before the attack was over to save their jobs; those who reported for treatment for the 'dry drunk' attack; and cases where a dominant spouse could be relied on to administer it regularly for a long time. I have not tried the hallucinogens so far, but I understand that d-lysergic acid diethylemide (LSD) and mescalin have been used with some success. These drugs produce a great variety of symptoms and sensations, such as 'being at one with the universe', and the experience of religious conversion not unlike that of AA.[15]

RESULTS AND PROGNOSIS

Results

It is difficult to assess results of treatment, and therefore published reports are few and may not reflect the true value of various methods of therapy. The source of the material (institution, private practice), criteria of judgment and methods of treatment must be taken into consideration. Results given by clinics, where patients report voluntarily, cannot be compared with those obtained in institutions or general practice, where the greater number of patients are unwilling. It is not that these are necessarily poor therapeutic risks. Follow-up of cases is made no easier by the alcoholic's frequent change of doctor and address and exaggeration of his period of sobriety. In an investigation of 50 alcoholics over a period of 2 years at Maudsley Hospital, Davies *et al.*[16] found that 18% remained abstinent during the whole period and another 18% 'for the greater part of the time'. Patients reported of their own free will and those who did not wish to give up drink were excluded, though their number is not given.

For my own assessment of response to treatment I have taken the following criteria: increase in the period of remission, good rapport, active membership in AA and evidence of psychological improvement.

Out of the 475 patients in my series, 269 were not seen again after the first 2 or 3 interviews, and for all I know may have done well elsewhere. If the 15 deaths are added to the figure of those who disappeared, there remained 191 patients (40%) who continued their treatment or could be followed up through AA and their excellent 'grape vine' and group activities (a member's 'slip' is soon known to group leaders and each year of sobriety is celebrated as a 'birthday' with speech, cake and candles). Of these 191 patients, 68 remained abstinent for at least 12 months (some for 2 - 5 years), and showed evidence of good prognosis. I considered them 'recovering'. Another 60 I called 'improving' on account of good rapport over a number of years and ability to keep their jobs in spite of 2 or 3 drinking sprees a year.

The remaining 63 showed no evidence of improvement, receiving treatment only when ill, 'nibbling at it' between attacks, moving from job to job, and generally deteriorating over the years. Most of them were chronic alcoholics with mental complications that precluded recovery by any measures, psychopaths and drug addicts. Thus, of all cases treated, whether willing or not, 14% were 'recovering' and 13% 'improving'. If those who reported voluntarily for treatment only are considered, the numbers would be 35% and 31% respectively. Even some of those 'recovering' had an occasional 'slip' after 1 - 5 years of abstinence, though many of them must have recovered for good.

Prognosis

Patients responding to treatment as assessed by the above criteria have a relatively good prognosis, although a given patient has to be well out of the bout before an assessment can be made. Those showing permanent mental damage, referred to in this article as 'chronic alcoholics', have a poor prognosis.

Although only 15 of my patients died (and I heard indirectly of a few more) during the 5 years under review, mortality must be high. The commonest cause of death was suicide (8 patients), followed by acute intoxication (2), intercurrent disease (2), and delirium tremens (1). Once the hepatorenal syndrome develops with painless jaundice, large firm liver, irreversible hypotension, and oliguria, the condition is fatal. In some patients surviving middle age, alcoholism appears to be self-limiting. I saw only 5 patients over the age of 60 and came across a few other aged persons with a history of alcoholism, who 'took a drink or two', now 'social drinkers' as it were, 'because my system cannot take it any more'.

SUMMARY AND CONCLUSIONS

The greater part of the literature on alcoholism deals with the aetiology, complications and treatment. In this article these aspects of the malady are reviewed and alcoholism defined. The clinical features, usually taken for granted, are described in some detail as observed in general practice. These features show that alcoholism is not merely harmful excessive drinking, but a definite clinical entity, a severe illness affecting only a small percentage (3 - 6%) of drinkers. If they can be accepted as described — the characteristic periodicity and the recurrence of the classical bout on chance drinking after years of abstinence — they should lend support to physiological theories of aetiology, to which more research should be directed. Appreciation of physiological causes and distinction from the mental and physical complications should lead to more effective measures and social handling of the problem.

There is no known cure for alcoholism in the sense that an established alcoholic can be made a social drinker again. Treatment therefore aims at helping the alcoholic to live without alcohol. It amounts to 'drying out' followed by social work, which is best done by the general practitioner.

Alcoholism is a major public health problem. Yet the majority of alcoholics are still left untreated and unheeded, to cause themselves and others untold damage, to break good homes and destroy successful careers. Their refusal

to accept treatment is not so much at fault as is lack of legislation, adequate hospital facilities and policy, prejudice and general ignorance of the problem.

I wish to thank Dr. Frances Reinhold for her encouragement and criticism.

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KARSINOOM VAN DIE PROSTAAT*

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In die afgelope 10 - 15 jaar is daar baie geskryf oor kanker van die prostaat, maar die idees het baie beperk gebly, en het meestal gedraai om die behandeling met estrogeen. Oor hierdie vorm van behandeling het baie skrywers hulle met opvallende beperkings uitgelaat. Die chirurgiese behandeling, wat bestaan het uit totale prostatektomie en selfs transuretrale reseksie, is breedvoerig behandel, en baie verbeterings is binne hierdie beperkte opvatting van behandeling voorgestel.

Die siekte kom so vroeg as op 40-jarige ouderdom voor, maar ook selfs so laat as op 90-jarige leeftyd. In baie van die gevalle bly dit in 'n verborge vorm sonder dat simptome ooit veroorsaak of ontdek word. Dit bly nog maar altyd die vernaamste kanker by mans.

Karsinoom van die prostaat is sonderling in dié opsig dat dit klaarblyklik veroorsaak word deur die manlike androgeen wat afkomstig is van die testikels en die byniere.

Anatomies is die prostaat 'n orgaan wat deeglik versteek is in die bekken, diep agter die pubiese simfise. Dit is buiteom bedek met endopelviese weefsel, en dit vul 'n gedeelte tussen die blaasnek (interne sfinkter) en die eksterne sfinkter. Die spierweefsel van die blaaswand is soortgelyk aan die spierweefsel wat gevind word in die prostaat (veral die proksimale deel), maar distaal en nader aan die eksterne sfinkter is die spierweefsel van blaas en sfinkter meer gemeng. Die spierseptums van die prostaat maak plek vir die werklike klierweefsel wat die periferie van die klier uitmaak.

Die klierweefsel dreineer in prostaatbuise wat geleë is in die posteriorkwab van die prostaat. Die buise open in die prostaat-sulkusse weerskante van die verumontanum.

Die bloedvoorsiening is afkomstig van die inferior vesikel en die middel-rektale arteries. Die veneuse dreinering open in 'n veneuse netwerk wat geleë is net onder die endopelviese fassiabedekking. Limf-dreinering geskied al langs die prostaatlis rondom die ureters.

Die funksie van die klier is om die ejakulasie van plus-minus 3½ ml. af te skei. Dit dien as draer van die spermatozoa, het 'n pH. van 6·5, en is ryk aan sitroensuur — veral suurfosfatase. Verder bevat die afskeiding proteolitiese ensieme.

Die menslike prostaat het 'n hoë sinkkonsentrasie en het die vermoë om sink te absorbeer. Hierdie eienskap bied die moontlikheid tot behandeling van prostaatkarsinoom met radioaktiewe sink.

Op die oomblik beskik ons vernaamlik oor informasie van kanker van die prostaat wat ingewin is deur die ondersoek van ná-operatiewe monsters, en dié is afkomstig van subtotale prostatektomies, d.w.s. ontleding van adenomateuse weefsel verkry van die laterale en middelkwabbe van die klier. Dit is dus geen wonder dat soveel as 96% geklassifeer word as adenokarsinoom nie.

Dit stem nie ooreen met ander bewerings, naamlik dat prostaatkarsinoom sy oorsprong in die posterior kwab het nie, d.w.s. in die deel van die klier waar daar weinig klierweefsel is, maar waar klierbuise wel die histologie uitmaak. Wat werklik gebeur weet ons nog nie.

Is dit miskien so dat die siekte in die posteriorkwab begin, en dat dit min of meer die histologie van hierdie deel naboots, maar dat, waar dit versprei na die werklike klierweefsel, dit in daardie geval weer die adenoom naboots? Ons vrees dat die ondersoeke in die verlede nog te eensydig was. Ons moet biopsies wat uitsluitend van die posteriorkwab afkomstig is, vergelyk met biopsies wat afkomstig is van subtotale prostatektomie of van T.U.R. Dit sal vir ons 'n verduideliking gee van die vraag waarom daar 'n hervatting van die groeisel plaasvind nadat dit aanvanklik gelyk het asof ons met estrogeen-behandeling sukses sou hê. Dit mag ons op die spoor bring van beter metodes van behandeling.

Ons moet probeer om vas te stel of dit die klein gedeelte van ongedifferensieerde gewas is, of anders hoeveel gedifferensieerde gewas 'n oorskot uitmaak na 'n skynbaar suksesvolle behandeling met estrogeen. Hierdie res, waar dit hom ookal bevind (òf binne die kapsule van die klier, òf daar buite), moet ons kan vernietig.

Die suurfosfatase in die bloed vermeerder in proporsie met die hoeveelheid gedifferensieerde kanker. Dit verminder met estrogeen-behandeling, en kan natuurlik afwesig wees in die prostaat-karsinoom waar die differensiasie swak voorkom.

Kapsulêre infiltrasie van die prostaat-kapsule kom reeds vroeg voor, en wanneer die seminale vesikels eers geïnfiltreer is, word die prognose baie swak.

Daar word beweer dat in 6% van dié gevalle waar subtotale prostatektomie gedoen is, kanker van die posteriorkwab en kapsule voorkom binne 3 jaar na die operasie. Maar volgens ons ondervinding kan 'n mens dit maklik so hoog as 25% stel. Sekondêre verspreiding buite die kapsule vind plaas langs die limf-dreinering wat gekonsentreer is in die prostaatlis; die verspreiding gebeur op 'n sentrifugale wyse na die naaste bene en verder.

Dieselfde simptome as die van die gewone blaasnek-obstruksie (naamlik moeilike urinering, met 'n swak stroom, dribbeling, en frekwensie) kom voor. Infeksie kom dikwels voor. Hematurie kom egter nie so dikwels voor as wat die geval is met adenoom van die prostaat nie.

Met die intree van uitsaaiings na die bene (veral die werwelkolom en heupbene), verduur die pasiënt baie pyn. Namate die rooibeenmurg verdring word deur kankerselle, word die pasiënt bloedloser. Ten slotte word die onderente van die ureters verdring deur die kanker, en die pasiënt sterf as 'n gevolg van uremie.

DIAGNOSE EN SPESIALE METODES VAN ONDERSOEK

1. *Rektaal.* Dit is die vernaamste en eenvoudigste metode van ondersoek; 73% van die gevalle kan met akkuraatheid vasgestel word.

2. *Sitologiese ondersoek.* Dit is nie van groot waarde nie; slegs 40% van die gevalle is akkuraat.

3. *Naaldbiopsie.* Dit het aanvanklik gelyk asof dit 'n goeie metode was, maar ongelukkig is 'n mens nie seker van die deel van die klier wat geneem word nie; dit kan wel van die posteriorkwab wees, maar net sowel enige deel van die prostaat. Naaldbiopsie is akkuraat in 73% van die gevalle, maar dit is nie sonder gevare nie. Bloeding is algemeen by hierdie metode en omliggende organe kan beskadig word.

* Voordrag gelewer tydens die Vyfde Akademiese Jaardag van die Geneeskundige Skool van die Universiteit van Stellenbosch en die Karl Bremer-hospitaal, Bellville, Kp., op 9 en 10 Augustus 1961.

4. *Perineale biopsie.* Hierdie metode is akkuraat in 91% van die gevalle, maar dit is 'n lomp manier van biopsie, en kan byna as 'n groot operasie beskou word.

5. *Monsters afkomstig van transuretrale reseksie* is nie akkuraat nie omdat dit die deel van die klier bevat wat die laaste deur kanker aangetas word.

6. *Radiologiese ondersoek.* (*a*) Van sekere bevindings met sisto-uretragram is daar min bewyse — miskien is ons nog nie vertroud met die metodes en interpretasie nie; en (*b*) wanneer uitsaaiings voorkom, is dit nie meer 'n kwessie nie.

7. *Sistoskopiese ondersoek.* Dit kan geen belangrike informasie verskaf nie.

8. *Transrektale biopsie.* Dit is die beste metode om vas te stel of daar 'n vroeë karsinoom van die prostaat is. Dit is betreklik maklik; die juiste harde nodule kan op hierdie manier ondersoek word. Daar is nie veel gevaar aan verbonde nie solank as sekere reëls nagekom word. Op hierdie wyse kry ons 'n kans om 'n vergelyking te tref tussen die histologie van die posteriorkwab en die histologie van die laterale kwabbe. Dit behoort die geskiedenis van prostaat-karsinoom en die wyse van ontwikkeling daarvan vir ons duidelik te maak.

In die differensiële diagnose moet veral onderskei word tussen karsinoom van die prostaat en adenoom van die prostaat. Minder algemene kwaadaardige gewasse van die prostaat, soos bv. sarkoom, limfosarkoom, en liomiosarkoom, kom voor.

BEHANDELING

1. *Totale Prostatektomie.*

Soos blyk uit die ondersoekte geskrifte oor prostaat-karsinoom, is totale prostatektomie nog altyd beskou as die aangewese behandeling. Maar dit moet onthou word dat slegs 2 - 10% van die gevalle vir hierdie behandeling kwalifiseer. Verder moet besef word dat daar maklik 'n foutiewe diagnose gemaak kan word. Voorts bestaan die gevaar van permanente ná-operatiewe inkontinensie.

Die operasie is tegnies moeilik omdat dié anatomiese deel van die liggaam moeilik bereikbaar is.

Chirurge wat hierdie metode toepas, maak uiteenlopende aansprake op sukses. Sommige beweer dat 50% van hierdie pasiënte nog leef na 10 jaar; ander skrywers, soos Franks, beweer egter dat slegs 27 - 30% langer as 5 jaar leef, ondanks die feit dat hierdie pasiënte ook met estrogeen behandel was. Aangesien estrogeen-behandeling op sigself dieselfde mate van sukses gee, is totale prostatektomie plus estrogeen-behandeling geensins 'n verbetering op die ou estrogeen-behandeling nie.

2. *Estrogeen-behandeling saam met Transuretrale Reseksie*

Dit was nog altyd die populêrste metode van behandeling en in die begin het die meeste uroloë gedink dat dit die oplossing was vir behandeling van karsinoom van die prostaat.

Later, en dit blyk uit al die geskrifte, is gevind dat die gewas weer groei ondanks die feit dat dit byna geheel verdwyn het ná 'n paar maande van behandeling. In selfs 20% van die behandelde gevalle is daar 'n totale weerstand teen die estrogeen-behandeling.

Wat sou die oorsaak hiervan wees? Is daar kanker wat wel tot 'n mate gedifferensieer is, maar wat weerstand teen estrogeen bied, óf is dit totaal ongedifferensieerde kankerweefsel wat as 'n oorskot ná behandeling bly, en wat weer begin groei? Hierdie twyfel kan ons bes moontlik ophef deur die pasiënte op te volg met 'n ondersoek van die bloedsuurfosfatase en ook deur een of meer transrektale biopsies. Op hierdie wyse moet die pasiënte opgevolg word, watter behandeling ook al toegepas word.

3. *Radioaktiewe Stowwe*

Daar word bv. radioaktiewe goud of radioaktiewe fosfor gebruik. Die nadeel van radioaktiewe stowwe is dat dit nadelig is vir die res van die liggaam van die pasiënt en ook vir die geneesheer. Verder is dit baie moeilik om die radioaktiewe stof eweredig in die hele klier in te plant, want gedeeltes van die klier is baie hard en oninfiltreerbaar.

4. *Behandeling met Chemikalië*

Dit kom vir ons voor as 'n redelike metode van behandeling die doel is om die oorskot van kankerselle ná estrogeen-behandeling aan te val met stikstof-mosterd preparate soos ‚thiotepa'.

Ons het probeer om die oorskot-groeisel verder te verminder met 'n toediening van stilbestrol di-fosfaat (‚honvan') gedurende en net na hierdie behandeling. Die honvan is selektief vir die prostaat, waar dit opgebreek word en stilbestrol in honderdvoud vrygelaat word, en terselfdertyd as 'n sitotoksien dien.

Ons is besig om vas te stel of die plaaslike toediening van chemikalië die afskeiding van suurfosfatase stimuleer en op dié wyse die opsplitsing van honvan meer effektief maak. Met hierdie soort behandeling van omtrent 24 gevalle is daar tot dusver baie bemoedigende resultate behaal.

Ons is besig met die ondersoek van die uitwerking van die verskeie chemikalië op die prostaat-karsinoom, en alreeds kon ons tot die gevolgtrekking kom dat dit 'n besliste stap vorentoe is in die behandeling van hierdie karsinoom.

PROGNOSE

Sonder behandeling. 85% sterf binne 3 jaar.

Behandeling met estrogeen. 25% leef langer as 5 jaar, en 70% sterf binne 3 jaar.

Behandeling met chirurgie en estrogeen. 70 - 75% sterf binne 3 jaar, en 31% leef langer as 5 jaar.

OPSOMMING

Ons kom tot die gevolgtrekking dat deur die behandeling met estrogeen en chirurgie slegs 'n klein persentasie pasiënte se lewe vir 5 jaar vergemaklik kan word, en dat ons in 70% van die gevalle die lyding kan versag, maar dat ons behandeling nie resultate bied vir sover dit die verdere verlenging van die lewe betref nie. Ons is verplig om ons toevlug te neem tot ander en beter metodes, en derhalwe tot die plaaslike toediening van chemoterapie, waarmee ons reeds 'n begin gemaak het.

Dit is juis die aanmoedigende resultate van die gevalle wat ons alreeds behandel het wat ons nou aanspoor tot gedeeltelike afwyking van die ou metodes. Hierdie nuwe metodes was tot dusver redelik vry van onaangename komplikasies, en bied uiteindelik 'n moontlike uitkoms vir so baie mans wat deur hierdie ongeluk getref word.

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MINUTES OF MEETING OF FEDERAL COUNCIL HELD IN CAPE TOWN ON 21, 22 AND 23 SEPTEMBER, 1961

(Continued from p. 1052 of the Journal *for 9 December 1961)*

FRIDAY 22 SEPTEMBER

Council met at 9.10 a.m.

61. *'Readers Digest' First-Aid Booklet:* Attention was drawn to the fact that the Committee had agreed to allow the name of the Association to appear on a First-aid booklet which was to be published and supplied to readers of the *Readers Digest.* It was pointed out that the Northern Transvaal Branch was busy preparing a First-aid booklet in connection with home accidents, and that the Committee on Trauma was likewise occupied in the preparation of a booklet dealing with factory and other accidents. In the circumstances it was questioned whether it was reasonable for the Association to have its name linked with a lay publication.

After discussion Council *Resolved* that, although it would be willing for the Association to render assistance in the

publication of a First-aid booklet by Readers Digest Limited, it could not agree to the publication of the Association's name in connection with the booklet.

62. *Publication of Unsigned Letters:* Dr. Gluckman paid tribute to the Editor and the Journal Committee for the continued improvement of the *Journal*, and went on to refer to the publication in the Journal of unsigned letters. He moved, 'That this Council disapproves the publication in the *Journal* of any anonymous or unsigned publication, and that the Editor be instructed that no such communication shall be considered'.

After discussion it was agreed that the motion should not be put to the vote, but that the matter be referred to the Journal Committee for consideration and report at a later stage.

63. *Report by the Editor:* The Chairman invited Dr. Blignault to report with regard to the Association's *Journal*. In doing so, the Editor paid tribute to the many contributors in both the medical schools and private practice. He mentioned the assistance and encouragement which his department was able to give to young authors, and spoke with appreciation of the support which was being received from the pharmaceutical houses.

The Editor's report was *Noted* with acclamation.

64. *Medical Insurance Agency:* It was proposed by Dr. Jabkovitz, seconded by Dr. Louw and *Resolved* that Council go into committee. After discussion Council came out of committee and *Confirmed* the resolution which it had taken, reading, 'That the question of sickness and accident insurance, sponsored by the Association, be referred to the Head Office and Journal Committee for consideration'.

Dr. Sichel then moved the adoption of the Report of the Head Office and Journal Committee. Council *Resolved* accordingly. The Chairman expressed the thanks of Council to Dr. Sichel and the Committee for the work which they had done.

REPORT OF THE MANAGEMENT COMMITTEE OF THE BENEVOLENT FUND

65. *Confirmation of Grants:* Dr. Sichel presented the Report of the Committee. He stated that it had been agreed to recommend to Council that the following grants be confirmed:

Border Branch: Mrs. V. M. N. R30.00 for month of July 1961 only;

Cape Eastern Branch: Dr. C. C. R25.00 per month as from 1 July 1961;

Cape Western Branch: Mrs. S. E. S. R20.00 for month of June 1961, and R10.00 per month as from 1 July 1961; Mrs. R. T. R10.00 per month from 1 June to 31 December 1961; Mrs. L. v. N. R10.00 per month from 1 July to 31 December 1961;

Eastern Transvaal Branch: Mrs. M. P. R60.00 for month of July 1961 only;

Natal Coastal Branch: Mrs. A. S. R40 per month as from 1 June 1961;

Royal Medical Benevolent Fund: Mrs. M. W.-S. R20.00 per month as from 1 January 1961;

Western Transvaal Branch: Mrs. M. D. W. R40.00 per month as from 1 July 1961.

Council *Agreed* accordingly.

66. *Triumph Herald Motor Car Competition:* The circumstances under which the Competition had come to be held were reported, and the Committee expressed its thanks and appreciation to the Triumph Herald Motor Car Company, Messrs. Lindsay Smithers (Natal) (Pty.) Ltd., the Natal Coastal Branch Medical Wives' Association and all Branches and members who had assisted in making the Competition a success. It was stated that it was not yet known how much would be received by the Fund as a result of the Competition, as, although some money had been received, there was a great deal outstanding from the various Branches. The results would be published in the *Journal* in due course. *Noted.*

Council *Endorsed* the appreciation and thanks expressed by the Committee.

67. *Votive Cards:* The request was made that the votive cards issued by the Benevolent Fund should be made more attractive. Council *Resolved* that this matter be referred to the Management Committee of the Benevolent Fund, and that any suggestions which members might have should be sent to the Secretary of the Fund.

68. *Additional Money for Distribution:* It was reported that during the year the Committee had been faced with a large number of requests for grants from an increasing number of needy persons, and it was likely that the amount available for distribution would be insufficient to meet the calls on the Fund. In the circumstances the Committee had agreed to recommend to Council that the Management Committee be empowered, if necessary, to draw on an additional 25% of the amount normally taken from current contributions, namely, that the amount available for distribution be the amount of the interest earned during the previous year plus 125% of that amount taken from contributions made during the current year. After short discussion Council *Resolved* accordingly.

Arising from this matter, discussion followed regarding ways and means of increasing the income of the Benevolent Fund. Mention was made of the various Medical Wives' Associations which had been formed in the Branches, and of the work which they were doing for the Fund. A number of suggestions were made, which included the publication of an annual brochure concerning the work of the Fund, and the institution of a 'Christmas Appeal'. Finally Council *Resolved* that these suggestions be referred to the Management Committee of the Fund for consideration.

69. *Donations to the Fund:* Dr. Sichel spoke with warm appreciation of the work which was being done throughout the country in an effort to augment the available funds. He drew attention to the fact that provision was made on the Association subscription account form for the addition of an amount as a donation to the Benevolent Fund, and he suggested that every member could assist by adding a small amount to his annual subscription.

Dr. Sichel's remarks were *Noted* with acclamation.

He then moved the adoption of the Report of the Management Committee of the Benevolent Fund. Council *Resolved* accordingly.

70. *Financial Report:* The Honorary Treasurer, Mr. Joubert, submitted a Report on the Revenue and Expenditure Accounts and Balance Sheet for the year ended 31 December 1960. As these had been published in the *Journal* and had also been dealt with at the Annual General Meeting, he asked if there were any questions. Questions asked dealt mainly with the membership of the Association, and the Chairman reminded Council that this matter had been dealt with on the previous day and the whole question had been referred to the Head Office and Journal Committee for consideration. There were no further questions, and Mr. Joubert moved the adoption of his Report. Council *Resolved* accordingly.

71. *Federal Ethical Committee:* It was reported that no matters had been placed before this Committee during the year under review. *Noted.*

REPORT OF THE PARLIAMENTARY COMMITTEE

72. *General:* Dr. Struthers reported that the Minutes of the various meetings of the Parliamentary Committee had been circulated, and that full details of the work done by the Committee had been contained in the Minutes, as also any decisions made by the Committee where action had been taken.

73. *Sight Screening of Industrial Workers:* It was reported that this matter had been considered at the request of the National Occupational Safety Association, and as a result the Committee had agreed to recommend to the Executive Committee, 'That the Association accept the invitation to be represented at the conference to be convened by the National Occupational Safety Association, and that Dr. E. T. Meyer be appointed as the Association's representative'. The conference had been held, and a report had been submitted. A further conference was to take place, and in due course a further report would be circulated. *Noted.*

74. *Health Conditions in Gaols in South Africa:* It was reported that gaols had been visited by two committees appointed by the Association, and that reports thereon had been dealt with by the Excutive Committee. Copies of these reports had been forwarded to the Commissioner of Prisons. *Noted.*

75. *Requirement of 'Domicile' in so far as Registration of*

Medical and Dental Practitioners is Conce d: It was reported that after negotiation the requirement o 'omicile' had now been deleted from Section 24 of the deal, Dental and Pharmacy Act by the amendment conta 1 in Section 4 (b) of Act No. 69 of 1961. *Noted* with accla ion.

76. *Specialist Registration for Medic Personnel Engaged in Public Health Work or Social Me he:* It was reported that this matter had been referred to Committee by the South African Medical and Dental Cc il which requested the opinion of Federal Council in th regard. After consideration the Committee had resolve to submit all the documents in connection with this mat without a recommendation, to Council for discussion.

The documents which had been circ ated were then considered, and discussion followed at some ngth.

It was proposed by Mr. Joubert, seconded by Dr. Whitsitt, 'That if the South African Medical and Dental Council feels that some members of the Medical Officers of Health Group have special knowledge of their subject and deserve recognition as such, the Federal Council is not against a specialist register for medical officers of health'.

An amendment was proposed by Dr. Sichel, seconded by Dr. Deale, 'That Federal Council has an open mind on the desirability of the registration of medical officers of health as specialists'.

On being put to the vote, the amendment was *Carried*. It was also *Carried* as a substantive motion .

77. *Salaries of Full-time Consultant Staff:* It was reported that the Committee had considered a resolution from the Branch Council of the Cape Western Branch, reading:

> 'That this Branch Council is of the opinion that the salaries paid to full-time consultant staff in teaching hospitals are inadequate and unrealistic. A Governmental Commission of Enquiry is suggested because, if it remains unsolved, it threatens to have an increasingly unhealthy effect on medical practice and education in this country.'

An accompanying memorandum had set out the reasons for the adoption of this resolution by the Branch Council.

The Committee had agreed to inform Council that it was of the opinion that —

'(1) The clinical professors holding appointments at teaching hospitals should preferably be employed in a full-time capacity and should be precluded from holding other extramural appointments at additional remuneration;

'(2) the salaries attaching to these posts at present are seriously inadequate;

'(3) the salaries should be made sufficiently attractive to attract the very best and highest qualified men;

'(4) the salaries attaching to the other full-time consultant posts should be up-graded in proportion;

'(5) it would be premature at this stage to request the appointment of a Government Commission of Enquiry into the matter.'

Representatives of the Cape Western Branch were invited to state their opinions, and finally it was *Agreed* that the matter be deferred to the next meeting of Council.

78. *Registration of Optometrists:* It was reported that, in accordance with the resolution adopted by Council at its last meeting, the Committee had made representations to the Medical Council in connection with 'the rules regarding the conditions under which registered optometrists may carry on their calling'. Copies of the relevant correspondence were submitted.

Council *Resolved* that the actions of the Committee in this regard be *Noted*.

79. *Proposed Amendment to South African Medical and Dental Council's Ethical Rule 1(6):* It was reported that this matter had been raised by the South African Medical and Dental Council, and after discussion the Committee had referred the question to all Branches for an expression of opinion. After taking these into account, the Committee had agreed to recommend to Council that it inform the South African Medical and Dental Council —

(1) That although there was a considerable body of opinion in favour of the tightening up of Ethical Rule 1(6), the Association was nevertheless of the opinion that the rule should be retained in its present form;

(2) That the Association considered that full-time officials should be more circumspect in making public statements and should recognize that the existing ethical rule imposed on them both a privilege and a responsibility.

It was further reported that the Committee had considered this question in relation to publicity which often took place at the time of the holding of a South African Medical Congress. As a result it had agreed to recommend to Council that it instruct Congress Committees to take the greatest possible care in connection with the issuing of statements to the public press and to ensure that such statements be issued only by the Press Liaison Officer, who should be properly instructed as to what would constitute unsatisfactory publicity.

Council *Resolved* that the three recommendations of the Committee, quoted above, be *Accepted*.

80. *Publication by a Medical Practitioner in Private Practice, under his own Name and Qualifications, of any Book or Article:* It was reported that the Committee had considered a request from a member of the Association that he be allowed to publish a booklet entitled 'First Aid for Boy Scouts', using his name and qualifications on the title page. In this connection the Committee had also considered the stated policy of the Medical Council as follows:

> '*The Policy of the Medical Council* in connection with the publication of articles and books by practitioners who are in private practice, arising from the requirements of Ethical Rule 1(6) and the Note thereunder, is that such practitioners may write scientific articles for publication in recognised medical journals under their own names, and that their names may appear in connection therewith, or may write or publish books of a scientific nature under their own names, and that their qualifications may appear in connection therewith, for use by the profession or by students in medicine or dentistry. Scientific books or articles of a popular nature by medical practitioners or dentists under their own names with the mention of their qualifications, for use by the general public, is not permissible, unless such books or articles are published under *noms-de-plume*, in which case the qualifications of the medical practitioners or dentists may not be mentioned.'

The Committee had submitted this matter to the Branches for consideration, and had taken into account the opinions received when it had agreed to recommend to Council that it declare its support of the policy of the Medical Council. Council *Resolved* accordingly.

81. *Commission of Enquiry into Compulsory Motor Vehicle Insurance (1960):* It was reported that the Committee had prepared and presented a memorandum to the Commission on this subject. Similar memoranda had been submitted to the Commission by the Association of Surgeons and the Orthopaedic Surgeons' Group. It was also reported that the Committee had requested the Commission of Enquiry that it be allowed to present verbal evidence. *Noted*.

On behalf of the Committee, Dr. Struthers asked the permission of Council to co-opt Mr. G. T. du Toit and any other suitable member to accompany the deputation to meet the Commission of Enquiry. Council *Resolved* accordingly.

82. *Charter for Chiropractors:* Members were reminded that a private Bill had been introduced into the House of Assembly at the last Session, and that this Bill had been subsequently withdrawn. The Committee, however, had anticipated the possibility of similar representations being made to Parliament in the future and had prepared a memorandum on this subject, copies of which were submitted. The Committee had agreed to recommend to Council —

'(*a*) That the memorandum be submitted to the Honourable the Minister of Health *via* the Secretary for Health, with the request that a Government Commission of Enquiry be appointed to investigate chiropractic;

'(*b*) That the Minister be requested to meet a deputation from the Association which would elaborate on the memorandum and the point of view of the Association;

'(*c*) That the memorandum be published in a supplement to the *South African Medical Journal*, but that this supplement be included only in those copies of the *Journal* forwarded to members of the Association;

'(*d*) That a copy of the memorandum be forwarded to all Members of Parliament, and that individual members of the Council and Association be requested to contact influential persons of their acquaintance in order to explain the Medical Association's point of view.'

After discussion, Council *Agreed* that the first two recommendations be *Accepted* for immediate action; and that the third and fourth recommendations be accepted in principle, but that action should only take place when decided upon by the Parliamentary Committee.

83. *Remuneration of Part-time Medical Officers at Local Clinics:* It was reported that the Committee had considered a resolution of the Council of the Cape Western Branch expressing dissatisfaction with the remuneration paid to part-time medical officers attached to local clinics. During the discussion, the Committee had noted—

(*a*) That Local Health Authorities were bound to remunerate part-time medical officers in their employ at State Health rates. These rates had been considered by Federal Council on repeated occasions during the last four or five years, and on each occasion the Council had resolved that the rates be accepted by the Association.

(*b*) That the Union Health Department, of its own accord, had increased the rates (by ±20%) with effect from 1 June 1960, and that when these increased rates had been considered by Federal Council at its last meeting (at the instance of the Natal Coastal Branch) the Council had again resolved to accept the recommendation of the Parliamentary Committee 'that the increased rates be accepted and that no further action be taken'.

The Committee had thus agreed again to recommend to Council that the increased rates paid by the State Health Department and Local Health Authorities to part-time medical officers be accepted and that no further action be taken. Council *Resolved* accordingly.

84. *Criteria of South African Medical and Dental Council for the Training of Interns:* It was reported that the Medical Council, at its meeting held in March 1961, had agreed 'that Paediatrics be added to the branches of Medicine considered suitable for internship in terms of the criteria for interns'. *Noted.*

85. *Red Cross Personal-safety Emblem:* It was reported that the Committee had considered a letter received from Dr. A. M. Coetzee, the Association's representative on the Regional Council of the South African Red Cross Society, requesting the opinion of the Association on a scheme to provide a 'personal-safety emblem' which the Society intended launching. An explanatory memorandum had been attached to the letter. The Committee had also considered a letter from the Honorary Secretary of the Medical Officers of Health Group requesting 'the views of the responsible Committee of the Association as to whether it is a desirable thing for all persons to be equipped with some form of medical identification'. The Committee had agreed to recommend to Council—

(*a*) That Dr. A. M. Coetzee be informed that the Medical Association considered the proposed scheme of the Red Cross Society to provide 'personal-safety emblems' for members of the public to be desirable, and also that it was of the opinion that the Society was an organization which was well equipped to launch and administer such a scheme;

(*b*) That the Medical Officers of Health (State Medicine) Group be informed of the above decision and be invited, on behalf of the medical profession, to co-operate with the Red Cross Society in the launching of the scheme.

The Chairman stated that a letter had been received from Dr. M. Shapiro regarding the engraving of blood groups on such emblems. Council generally *Agreed* that it would be undesirable to include blood groups on the emblems; but it nevertheless *Resolved to Endorse* the recommendations of the Committee.

86. *Registration by South African Nursing Council of Technician Qualifications as Additional Qualifications for Nurses:* Council was reminded of a previous resolution on this subject, and various documents were submitted indicating that both the South African Nursing Council and the South African Medical and Dental Council were giving continued consideration to this matter. Council *Resolved* that the Parliamentary Committee continue to deal with this subject on behalf of the Association.

87. *Discriminatory Salary Scales Applicable to Non-European Doctors Employed by the Central Government and Provincial Administrations:* It was reported that the Committee had considered many representations made to it on this subject, and had resolved—

(*a*) That it would seek an interview with the Executive Committee of the Medical Council for a full joint discussion on the discriminatory salary scales applicable to non-European doctors employed by the Central Government and Provincial Authorities;

(*b*) To direct the Assistant Secretary to attempt to arrange for this interview to take place during the September 1961 Meeting of the Executive Committee of the Medical Council or as soon as possible thereafter.

It was pointed out that, although it had not been possible to arrange a meeting in September, one would be arranged for October. Council *Resolved* that this matter be left to the Parliamentary Committee to take whatever action might be necessary to bring the matter to a speedy settlement.

88. *The Levying by Medical and Dental Practitioners of a fee for the use of Operating Theatres Attached to their Consulting Rooms—Request by the Medical Council for an Expression of Opinion on the Principle Involved:* It was reported that correspondence on this subject, which had been circulated, had been considered by the Committee, which had agreed to recommend to Council 'That the Medical Council be informed that the Medical Association is of the opinion—

'(*a*) That there should be no objection to a medical or dental practitioner creating facilities (including theatre facilities) for his own convenience in the treatment of patients, provided that the patients are not required to pay a fee for the use of these facilities. There should also be no objection to the medical or dental practitioner concerned making such facilities available to his colleagues without charge.

'(*b*) That medical and dental practitioners should not, however, be permitted to levy a fee for the use of the facilities provided in their consulting rooms, unless the premises are registered as a nursing home with the Department of Health.

'(*c*) That, in so far as the theatres attached to registered nursing homes are concerned, certain minimal requirements, particularly in connection with the anaesthetic and resuscitative equipment supplied, should be prescribed and enforced by the registering or licensing authority.'

Council *Resolved* accordingly.

89. *Other Matters Dealt with by the Committee:* It was reported that a number of other matters had been dealt with or were being dealt with by the Committee, and confirmation of the actions of the Committee since the last meeting of Council was requested. Council *Resolved* accordingly.

Dr. Struthers then moved the adoption of the Report of the Parliamentary Committee. Council *Resolved* accordingly, with acclamation.

Dr. Struthers expressed his thanks to the members of the Committee and to the Secretary of the Committee for the work which they had done. Dr. Schneider expressed the thanks of Council to Dr. Struthers and his Committee. Acclamation.

90. *Announcements:* The Chairman announced that a meeting had been arranged to take place at 11.30 a.m. on 25 September 1961, in the Lecture Theatre of the Arts Block at the University of Cape Town, when members of Council would have an opportunity of meeting Dr. I. D. Grant (Chairman of Council of the British Medical Association) and

Dr. D. P. Stevenson (Secretary of the British Medical Association), both of whom would be asked to address Council. *Noted.*

The Chairman also announced that after the lunch adjournment the Report of the Central Committee for Contract Practice would receive attention, and that Dr. Hansmann (Managing Director of Sansom) had been asked to be present in order to address Council. *Noted.*

Council adjourned for lunch from 1 p.m. to 2.20 p.m.

91. *Sansom — Address by Dr. Hansmann:* The Chairman welcomed Dr. Hansmann, who was present by invitation. Mr. Mackenzie, as Chairman of the Central Committee for Contract Practice, briefly described to Dr. Hansmann 10 particular matters which were troubling members of the Association in regard to the Sansom scheme. Dr. Hansmann was then invited to put the point of view of Sansom to Council. He did so by replying in detail to the 10 points raised by Mr. Mackenzie, and his address was received with acclamation.

The Chairman stated that Dr. Hansmann would be willing to reply to any questions which members might wish to put to him. Many members had questions which they wished to put to Dr. Hansmann, and the Chairman ruled that these be put with regard to policy matters only and not with regard to matters of detail. Dr. Hansmann continued to reply to questions until the tea adjournment.

In conclusion the Chairman thanked Dr. Hansmann for attending the meeting, for his address and for the answers which he had given to the many questions asked of him. The Chairman's remarks were *Endorsed* by the acclamation of Council.

REPORT OF THE CENTRAL COMMITTEE FOR CONTRACT PRACTICE

92. *Meetings of the Committee:* The Chairman of the Committee, Mr. Mackenzie, reported that his Committee had met on two occasions since the last meeting of Council, and that the Executive of the Committee had met on four occasions. All the meetings had entailed night sittings. *Noted.*

93. *Policy in regard to Medical Aid Societies:* It was reported that the Committee had dealt with the resolution passed at the Special Meeting of Federal Council held in July, reading, 'That this meeting endorses the present policy with regard to Medical Aid Societies, and that the three points raised in Dr. Shapiro's motion be referred to the Central Committee for Contract Practice for consideration and report'. It was mentioned that the three points referred to were:

(*a*) The recognition of new Societies with regard to payment direct and in full by the Society.
(*b*) The limits of 20 visits and consultations with general practitioners.
(*c*) That the benefits offered to members of Societies shall merit the concession by the Association of the preferential tariff.

With regard to (*a*), it was pointed out that the Committee enforced the observance of this rule on all Societies applying for recognition.

With regard to (*b*), Mr. Mackenzie said that the question of 20 visits had not caused the Committee any trouble, and that no complaints had been received. The Committee had, however, agreed to recommend to Council, 'That Societies should be enabled to have a clause in their constitutions giving them the right to a second opinion before agreeing to additional treatment; but in the event of a Society requesting a second opinion, the attending practitioner will have the right to elect who shall give that second opinion, subject to the approval of the Medical Aid Society'. Council *Resolved* that this recommendation be *Accepted.*

As far as (*c*) was concerned, it was reported that the Committee felt that the Association should not dictate to a Society what limits to place on its members, and that the internal administration of a Society was not the concern of the Association, as long as it provided a reasonable, comprehensive service. Council *Agreed* accordingly.

It was reported that the Committee had considered certain other matters in relation to Medical Aid Society policy. One of these concerned the question of a sliding scale of subscriptions, and in this connection the Committee had agreed to recommend to Council, 'That in the opinion of the Committee the rule regarding the sliding scale of subscriptions should not be enforced in respect of employer-subsidized Societies'. It was mentioned that a committee in the Transvaal was at present considering this matter, and in the circumstances Council agreed that it would take no resolution at this stage, but that it would leave it to the Committee to use its discretion in this regard.

It was further reported that Rule 7 of the General Preamble to the Tariff had been considered, as the Committee felt that the wording was not entirely clear. In the circumstances it wished Council to give a ruling.

The Secretary stated that the Executive Committee had considered this matter and had agreed to recommend to Council that the words at the end of Rule 7 be altered so that the paragraph would read:

> '7. Medical practitioners who have agreed to work on this tariff of fees for Medical Aid Societies should not differentiate between which members of a Medical Aid Society they will treat at tariff rates and which they will treat at private rates. That is to say, once a medical practitioner has agreed to charge members of Medical Aid Societies tariff rates, he should charge such rates for all Societies approved by the Association.'

Council *Resolved* accordingly.

It was further reported that the Committee had considered the liability of Medical Aid Societies for accounts of members, and the interpretation of Clause 8 in the General Preamble to the Tariff.

The Secretary stated that the Executive Committee had considered this question and had agreed to recommend to Council that the words 'Accounts which are older than six months will not be acknowledged as claims and will not be paid', contained in Rule 8, be altered to read: 'Accounts which are rendered for the first time after six months will not be acknowledged as claims and will not be paid'.

Council *Resolved* that the recommendation of the Executive Committee be *Accepted* and that the matter be negotiated with the representatives of the Medical Aid Societies.

Council adjourned for dinner from 6.40 p.m. to 8.35 p.m.

(to be concluded)

THE BENEVOLENT FUND : DIE LIEFDADIGHEIDSFONDS

The following donations during October 1961 are gratefully acknowledged:
Met dank word die volgende skenkings gedurende die maand Oktober 1961 erken:

Votive Cards in Memory of : Geloftekaarte ter Nagedagtenis aan:
Mrs. Ruby Linder *by* Shirley Cole and Prof. J. F. Brock; Dr. D. H. Klugman *by* Dr. W. A. Kerr; Dr. H. W. Dyke *by* Mr. and Mrs. T. H. Starling, Mr. Eric Dyke and Dr. G. Whiteside-Robertson; Mrs. Mizzie Baumann *by* Dr. and Mrs. J. Silberbauer, Dr. and Mrs. F. S. Charnock, Dr. A. W. Spratt, Dr. and Mrs. A. W. Sichel, Dr. and Mrs. R. D. H. Baigrie, and the Honorary Medical Staff of Rondebosch and Mowbray Hospital; Dr. H. J. F. Wood *by* the Medical Superintendent and Staff of Westford Institution; Mrs. E. Emery *by* Dr. B. Krikler; Mr. Jack Thrash *by* Dr. R. B. Peckham; Mr. Manie Edwards *by* Dr. A. H. Baxter; Dr. A. C. Beckett *by* Dr. P. H. B. Maytom; Dr. N. H. G. Cloete *by* Dr. and Mrs. A. W. Sichel and Dr. R. Lance Impey; Dr. M. Ginsburg *by* Dr. J. R. Reznek.

Total Received from Votive Cards: R73.45
Totaal Ontvang van Geloftekaarte:

Services Rendered to : Dienste Gelewer aan:
Naomi, late wife of Dr. I. Sagor *by* Drs. H. L. de Villiers Hammann, G. J. Luyt, B. Kahanowitz, J. M. du Toit and G. B. Landsman.

E. Mary Dyke *by* Dr. A. J. Biesman Simons and Mr. Leon Lane.

Late wife of Dr. V. de Villiers *by* Drs. L. Slabbert, A. M. Louw, M. A. de Kock, A. H. McCallem, J. J. W. van Zyl, G. Beyers (Dentist), Prof. F. D. du T. van Zyl, Prof. James Louw, and Prof. A. J. Brink.

Dr. J. Duncan Taylor *by* Drs. D. A. Edington, J. A. Macfadyen, R. J. P. Venning, J. Leeming, H. Chait, and Dr. M. C. Stevens.

Mevr. C. A. Strydom *deur* Dr. I. S. de Wet.
Dr. J. W. v. d. Riet *deur* Dr. P. Dreyer.

Total Received from Services Rendered:
Totaal Ontvang van Dienste Gelewer: R320.00

Donations : Skenkings:
Drs. Harries, Kuschke, Hofmeyr, D. F. Fismer, F. P. Fouche, and Dr. I. A. Kajee.

	R. c.
General Practitioners Group (Transkei Sub-Group)	16.00
Sisters Incorporated (Collection flower stalls — Medical Ball)	29.27
Farewell party for Mr. A. Lee McGregor	30.00
Cape Western Branch M.A.S.A. (Collection Box)	15.00
Mrs. A. H. Honikman	4.00
Golf Kompetisie — Bloemfontein se Geneeshere	31.00

Total Received from Donations:
Totaal Ontvang van Skenkings: R127.62

Grand Total : Groot Totaal: R521.07

COLLEGE OF PHYSICIANS, SURGEONS AND GYNAECOLOGISTS OF SOUTH AFRICA

EXAMINATION RESULTS

The following candidates were successful in the examinations of the College of Physicians, Surgeons and Gynaecologists of South Africa, held in Johannesburg in October this year:

Fellowship of the College of Physicians of South Africa:
David John Guillemard Fergusson, Durban
Hendrik Willem Lindley Kok, Johannesburg
Reginald Bernard Levy, Johannesburg
Felix Theodore Schneier, Johannesburg

Fellowship of the College of Surgeons of South Africa
Theunis Coetzee, Pietermaritzburg

Fellowship of the College of Obstetricians and Gynaecologists of South Africa
Johannes Hendrikus de Kock, Johannesburg

Fellowship of the Faculty of Anaesthetists of the College of Physicians, Surgeons and Gynaecologists of South Africa
Anna Catherina Buys, Pretoria

Fellowship of the Faculty of Psychiatry of the College of Physicians, Surgeons and Gynaecologists of South Africa
Gert Petrus Johannes van Niekerk, Queenstown

Diploma in Midwifery of the College of Obstetricians and Gynaecologists of South Africa
Robert Desmond Catterall, Gatooma, SR
Robert Hugh Philpott, Cape Town
Berel Sarzin, Johannesburg
Robert Charles Short, Durban
John van Duyn, Pretoria

Primary Examination for the Fellowship of the College of Surgeons of South Africa
Hercules Michael du Preez, Wynberg, CP
Berthold Wilhelm Hellberg, Durban
Wessel Hendrik Janse van Rensburg, Johannesburg

Primary Examination for the Fellowship of the Faculty of Anaesthetists of the College of Physicians, Surgeons and Gynaecologists of South Africa
John Albert Cowlin, Bellville, CP
Petrus Nicolaas Smith, Johannesburg
Warwick George Staples, Walmer, CP

Primary Examination for the Fellowship of the Faculty of Psychiatry of the College of Physicians, Surgeons and Gynaecologists of South Africa
Joan Anderson, Cape Town

PASSING EVENTS : IN DIE VERBYGAAN

The Southern Transvaal Branch (M.A.S.A.) and the Dental Association of South Africa will hold a joint meeting at Medical House, 5 Esselen Street, Hospital Hill, Johannesburg, on Tuesday 23 January 1962 at 8.15 p.m. Mr. H. Reitz will address the meeting on the subject 'Metal implants for dentures', and a recent film on the subject will be shown.

* * *

Dr. Percy Gersholowitz, general practitioner, of Cape Town, has resumed his practice after returning from a year of study at the Tavistock Clinic, London. Dr. Gersholowitz attended seminars and lectures on psychotherapy.

* * *

Mr. H. C. van der Post, who has recently returned from a period of study in England, has joined Mr. Leo Mirkin in practice as an orthopaedic surgeon in Port Elizabeth.

Somerset Hospital Monthly Clinical Evening, will be held on Tuesday 19 December at 8.15 p.m. in the Nurses' Main Lecture Hall, Somerset Hospital, Green Point. All those interested are invited to attend this meeting.

* * *

The South African Paediatric Association (M.A.S.A.), 1962 Essay. A Prize of R40 and a Medal will be awarded to the best essay submitted on the subject 'Management of the newborn infant with asphyxia'. The closing date for the competition is 30 April 1962, and paediatric essays must be sent to Dr. N. M. Mann, Department of Child Health, University of Natal, Durban.

* * *

Dr. Aaron Penn has joined Dr. Bernard Berger, M.R.C.O.G., in practice as an obstetrician and gynaecologist at 712 Harley Chambers, Jeppe Street, Johannesburg.

IN MEMORIAM

CLIFFORD ELLIS ROBERTS, *O.B.E.*, B.M., B.CH., F.R.C.S. (EDIN.), D.T.M. & H.

Major D. O. Stratford, of Pretoria, writes:

It is with regret that former members of the South African Medical Corps who served in East Africa, and in particular with No. 6 E.A. Hospital at Nairobi and later Mombasa, during Warld War II, will learn from the *British Medical Journal* of 7 October 1961 of the passing of a war-time colleague and friend in the person of Major Roberts, who was surgeon at and later Officer Commanding of the above hospital.

He died suddenly at Hammersmith Hospital (of which he was Medical Superintendent for the last three years) on 25 September 1961. For his War Service he was appointed *O.B.E.* in 1945 and, on retiring from the post of Senior Medical Officer in Zanzibar, was awarded the Brilliant Star of Zanzibar.

Anyone who was in any way associated with 'Robbie' will remember him for his ready wit and keen sense of humour. At all times calmly competent he was a most likable person, while his willingness to listen and to help won him many friends, not only in the unit but also with his patients. As a lay officer who worked in the same unit, I can vouch for his popularity and the high esteem in which he was held by the entire staff — in fact by everyone who had the pleasure of knowing him. He was a gentleman in the true sense of the word.

CORRESPONDENCE : BRIEWERUBRIEK

MEDICAL HISTORY

To the Editor: Man's interest in 'medical' history is perfectly natural. His ability to orientate himself in time and space, his powers of communication (speech, writing), and his very understandable concern for the health (physiology) and disease (pathology) that influence the nature, character and duration of his existence, make him a natural medical historian.

Recognition of the 'importance' of medical history should occasion no surprise either. Health and disease have been of prime importance to his 'development' through the ages.

As 'historical knowledge is the most perfect form of knowledge' (Benedetto Croce), the recent formation of the University of Cape Town Medical History Club to study the record of efforts, ideas, methods and achievements in every age and every state of society thus deserves not only our warmest good wishes, but also our cooperation and assistance, and it is with every goodwill and sense of responsibility that I therefore proffer a few observations on this memorable occasion.

'History' (to know), the dictionary tells us, is 'a systematic record of past events especially those of importance in the development of men and peoples'. Since by definition there are two aspects to 'knowing' (history) — the record, chronicle or trail of 'events'; and the estimate of their influence, value, and significance in the transformation (development) of man and the social organism ideologically, materially, medically, methodologically, etc. — the study of 'medical' history cannot consist in knowing only when and by whom a particular portion of the anatomy was first described, an instrument invented, or a remedy used, but in perceiving and understanding also their influence on medical practice, outlook, method, education, and society.

It is not enough to know that Andreas Vesalius, Professor of Anatomy and Surgery at the University of Padua, published his Seven Books of Human Anatomy in June 1543 in the city of Basle, interesting as this fact (event) may be. It is 'important' to realize that this outstanding achievement broke the fetters of 1,500 years of tradition — the Galenical anatomy of 'monkeys, swine and goats' (Sigerist), liberated the potentialities of the 'medical' intellect, laid the foundations for the accurate localization of disease (diagnosis), the development of modern surgery, the rewarding generalizations of pathology, and a true basis for physiology.

In our own day and age to know that Alexander Fleming's observation of the dissolution of staphylococci in 1928 by the contaminant *Penicillium notatum* led to the discovery of penicillin is interesting, but to realize that this led to the recognition of the potentialities of fungi as important sources of powerful therapeutic agents, specialized screening techniques for their recognition, vast pharmaceutical enterprises employing thousands, the saving of countless lives and innumerable man-hours of work, and the development of new and previously non-existent penicillins by analytical chemists for war on the ubiquitous and lethal staphylococcus, is to recognize both the importance of the observation to man and society and the *meaning* of 'medical' history.

The purpose, then, of studying medical history is not to become a mere 'archivist of facts' (Ravlov), but to understand the present in terms of the past, to learn the lessons of history, to realize that 'truth' and not 'authority' is sacred, to see that 'chance favours the prepared mind' (Pasteur), that great and far-reaching generalizations, accomplishments and benefits come from small and apparently insignificant observations, and that historical knowledge of the origins and methods of medical knowledge fertilize our own medical development and maturity.

What, it might well be asked, has the study of all this really got to offer? Everybody knows that thinking is not static, ideas change, discoveries are made, and progress occurs!

Let's not be so superior! We still to this day employ an age-old concept like 'intestinal toxaemia' to explain mental changes in liver failure. When we changed 'septic focus' to 'load factor' and then later on called the patient a 'carrier', did we change the idea or the words? As for that 20th century lullaby 'progress' — do we still know the cause of rheumatoid arthritis, toxaemia of pregnancy, leukaemia, or possess a cure for the common cold, to mention but a few examples of our lack of ideas, discoveries and progress?

It is sobering to remember that, by and large, we are still studying the same problems as our predecessors — Hippocrates *et al.* — and that what we need to realize is that it is not only in the light of new facts (events), but also from a better knowledge, grasp, assessment and utilization of old ones (past events) that we become more forward-looking, change our ideas, and make progress as well. To take but two examples: (1) The antibiotic era crystallized in 1945 through Florey and Chain's development of Fleming's observation of 1928 regarding the dissolution of staphylococci by *Penicillium notatum*. (2) Adrian's development of electroencephalography was suggested by Burger's work on electrical impulses in brain tissue done many years before.

All this and more is why the study of medical history — the men, their discoveries, ideas, the origins and methods of their knowledge, and their influence in the various ages and stages of thought and endeavour — is important. Let us not forget that reality is elusive, that medical history is not merely interesting, but highly informative, providing perspective, creating new knowledge, and teaching humility, besides deepening our awareness of the debt of man and society to our predecessors for the milestones they erected along the road of thought.

The rôle and purpose of a medical history club is to act as a bridge between the past and the present, to teach and educate 'medical' men to regard medical history not merely as a chronological and biographical record, but as a tool, instrument and method for the better understanding and practice of medicine. And all this is nothing new, really. The doctor is practising 'historical' method every day. He takes a systematic record of recent, past, and family events (history), formulates 'ideas' of their possible 'importance' (differential diagnosis), examines the 'events' and 'ideas' by physical and other methods (blood count, X-ray, etc.), and in the light of 'experience' (lessons of history) assesses their importance to the patient (correct diagnosis) and to his future (prognosis), and obtains sound guidance for his immediate and future development (correct therapy).

Remembering then that 'doctor' means 'scholar' (Sigerist), let us return to the school of the past, visit again the ancient seats of medical learning, listen once more to the great teachers, to the dissenters, non-conformists and revolutionaries, to their ideas and controversies, see what they tried to do and what they accomplished, as well as what they failed to do and why. And in so doing let us honour them too. Their problems were vast and their perspicacity tremendous — 'science does not consist only of the accumulation of isolated facts. From time to time it is necessary to forge a new doctrine from the accumulation of facts' (Burdach); their courage is inspiring and their self-sacrifice legendary — 'great truths have never been received with implicit submission. In every age and every state of society, the newest and the highest must undergo more than one ordeal, the ordeal of the ignorant' (Brewster); and 'their accomplishments phenomenal, science gains nothing by replacing one theory by another without proof' (Claude Bernard). In service to their fellow-man 'truth was their bondman and they sought the confidence of reason' (Wordsworth). With their record our glory, and their example our guide, truly indeed is medical history important and worthy of study.

M. Glass

Medical Centre
Cape Town
21 November 1961

MEDICAL HISTORY

To the Editor: For the sake of the records I should like to comment on your Editorial[1] of 18 November 1961.

Four years ago (from the beginning of 1958) when I was Senior Lecturer in the Department of Surgery, University of the Witwatersrand, I instituted a course on the history of medicine which was given to third year medical students as part of their systematic surgical tuition. Furthermore, a series of interesting illustrations of great medical figures and events,

accompanied by relevant and apt text, was incorporated in the Surgical Pathology Museum as a permanent exhibition. To date we have arranged over twenty tabloids in chronological order, and we make additions as the opportunity arises.

When Prof. D. J. du Plessis assumed the directorship of the Department of Surgery, he heartily approved of this and has constantly encouraged this aspect of medical education.

Since 1958 and to date I have been delivering a series of four to six lectures annually on the history of surgery, and this has constituted an integral part of surgical instruction to medical students.

The criticism of some third-year students has been that unfortunately they are as yet not knowledgeable enough in clinical medicine and surgery to appreciate the many new scientific terms and procedures referred to. However, I hope that this difficulty can be overcome by first defining some of these terms and explaining their importance in the principles of surgery, and then incorporating this knowledge in its true historical perspective. Another difficulty has been the appalling ignorance of many students of the great movements in world history and the environmental and sociological backgrounds of nations and civilizations.

Anthony J. Leonsins

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Johannesburg
25 November 1961

1. Editorial (1961): S. Afr. Med. J., **35**, 959.

SHOULD A DOCTOR TELL?

To the Editor: In the light of the remarks made by the presiding judge in the case Polack *v.* Mirkin, that 'it may be possible to formulate some principle which will serve as some sort of guide to individual medical practitioners in the future', I feel that a useful purpose would be served by eliciting the views of medical practitioners on this difficult problem, through the medium of the *South African Medical Journal*.

The conflict regarding responsibility lies essentially in the field of medical ethics, and stems from the Hippocratic doctrine.

If a doctor discovers that a patient is suffering from cancer, his first duty is to ensure that such a patient gets the advantage of immediate and adequate treatment. Whether the diagnosis should be disclosed must be decided on the merits of each individual case. If the patient insists, he must be told, but this information should not be volunteered without compelling reasons.

In coming to a decision, first of all the doctor should bear in mind how, in his opinion, the patient is likely to react to a grave prognosis. Lord Cohen, a former President of the British Medical Association, has written in *Medical Ethics* (a symposium on ethical problems, edited by Maurice Davidson):

'No one who has spent a life-time in practice can have failed to observe the immediate effect on the patient of telling him that he is a victim of a fatal, and it may be, a painful disease such as cancer. The few who are stoics appear to accept their fate with resignation if not with equanimity; some accept more philosophically than might have been anticipated their approaching death; but for the vast majority . . . to remove that hope (that Dr. Johnson said is "itself a species of happiness and perhaps the chief happiness which this world affords") is unwarranted.

'And if further justification for withholding what we conceive to be the truth from the patient be needed, it lies in the possibility that our diagnosis may be mistaken and that at any time the cure may be found for what was hitherto regarded as incurable disease.'

Next, there is the problem whether the diagnosis can be divulged to relatives. The International Code of Medical Ethics, adopted by the World Medical Association in 1949, lists among the duties of doctors: 'A doctor owes his patient absolute secrecy on all which has been confided to him or which he knows because of the confidence entrusted to him'.

It is held by some that in the interests of the patient's welfare it may be advisable to inform a responsible relative of the diagnosis. In my opinion the decision, as in the case of informing the patient himself, should rest squarely on the shoulders of the family doctor, based on his professional knowledge and experience of the family — a decision which no doctor can make lightly. To do otherwise would be a betrayal of his position, not only as the family medical adviser, but as 'their guide, philosopher and friend'.

For more than 25 centuries a traditional doctor-patient relationship, based on complete mutual trust and reciprocal obligation, has developed. This above all other considerations is what has made Medicine a vocation which has occupied a unique position of respect in the minds of the public. Any action that might undermine this age-old relationship would result in immeasurable harm to humanity.

Finally, several recent court decisions may be of interest to practitioners. These were reported in *Medical Negligence*, by the Rt. Hon. Lord Nathan P.C., in 1957. I quote one of these cases:

'In another recent English case the patient was seen by a doctor who diagnosed a toxic goitre; he discussed with the patient the possible alternative treatments, namely an operation or medical treatment by drugs, and pointed out that the treatment by drugs would take a long time. The patient chose the operation, and in the course of it her left recurrent laryngeal nerve was injured and the left vocal cord paralysed. The patient brought an action against the doctor and the surgeon who performed the operation, alleging against the doctor that he negligently advised her that there was no risk to her voice involved in the operation and against the surgeon that he had performed the operation negligently and unskillfully. In the course of the evidence the doctor denied having told the patient that there was no risk to her voice, but the surgeon admitted that he had told her just that.

'Denning, L. J., in summing up to the jury said, "What should a doctor tell a patient? (The surgeon) has admitted that on the evening before the operation he told (the plaintiff) that there was no risk to her voice when he knew that there was some slight risk; but that he did it for her own good because it was of vital importance that she should not worry . . . He told a lie; but he did it because in these circumstances it was justifiable . . . But the law does not condemn the doctor when he only does what a wise doctor so placed would do. And none of the doctors called as witnesses have suggested that (the surgeon) was wrong. All agreed it was a matter for his own judgement. If they do not condemn him, why should you? It is for you to say whether you think that (the doctor) told her that there was no risk whatever, or he may have prevaricated to put her off, as many a good doctor would rather than worry her. But even if you think that he did tell her, is that a cause for censure?"

'The jury returned a verdict in favour of all the defendants.'

R. Lance Impey
Previously Lecturer in Medical Ethics, University of Cape Town

Finchcroft
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17 November 1961

TWO UNUSUAL CASE REPORTS

To the Editor: The following 2 case reports illustrate sufficiently rare clinical findings to warrant their publication.

1. INTESTINAL HAEMORRHAGE AFTER A STAB WOUND

A few years ago an African female, aged about 35 years, was admitted to hospital under my care with a punctured stab wound in the lower abdomen following a knife attack.

The admitting medical officer reported to me that there was an incised wound about ¾ inches in length in the skin of the lower abdomen, and that on admission she had passed a stool consisting of a whole bedpan full of fresh blood. It was assumed that the stab wound had penetrated the bowel and that an immediate laparotomy was therefore necessary.

Examination of the patient showed that she had a temperature of about 103°F. Her abdomen was soft and a wound about ¾ inches long was present in the lower abdominal wall. After careful consideration, it was decided that it was most unlikely that a wound into the lumen of the gut had caused so much bleeding per rectum and such a high degree of early temperature.

Consequently, a tentative diagnosis of third-week typhoid fever was made. The stab wound was explored with a probe,

did not appear to penetrate the abdominal wall, and was considered to be quite coincidental.

A white-cell count then showed a corroborating leucopenia, and a subsequent Widal test was positive.

The abdomen was not opened and the patient made an uneventful recovery on treatment for typhoid bowel haemorrhage.

On reconstructing the case, we believed that, as a third-week ambulant typhoid patient, this woman was crotchety, irritable, and easily roused to anger. Her friends, not being aware of her illness, provoked her slightly, and this gave rise to a fight, with the resultant superficial abdominal stab wound.

2. PENCIL IN THE PELVIS

A European girl, aged about 15 years, was brought to me by her mother with the complaint that she 'was playing with a small piece of indelible pencil and that this had disappeared into the vagina'.

Gynaecological examination showed that the young lady was by no means a virgo intacta.

She had an infantile type of uterus and there was no sign of the pencil in the vaginal fornices. The external os of the cervix was tightly closed, with no sign of injury to the mucous lining and no bleeding.

An X-ray picture was then taken and showed clearly the presence of a lead-pencil, about 3 inches long, in the pelvis.

There being no signs of a wound in the fornices or of any trauma to the cervix and, since the pencil was seen to be lying transversely in the lower abdomen, it was assumed that it was in the urinary bladder. A brief examination with a cystoscope, after filling the bladder with water, confirmed this diagnosis.

Through a small incision, a suprapubic cystostomy was done. The pencil, being wood, was floating on top of the water in the bladder. As soon as the incision extended into the bladder the pencil was extruded with such force that it landed about a yard away.

The bladder wound and abdominal wall were closed and the patient left hospital about 4 days later with the injunction that in future she should exercise more care in her correspondence.

C. Coswald Brown

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Natal
20 November 1961

THE ELECTROCARDIOGRAPHIC EXERCISE TEST

To the Editor: We read with interest the excellent article by Dr. L. Schamroth[1] on an appraisal of the electrocardiographic exercise test in the *Journal* of 21 October 1961, and would respectfully like to make some comments.

Firstly, although one should not standardize the amount of exercise, since a young, healthy patient can do much more than an elderly, inactive subject, it is still convenient to use the Master two-step test for the effort. 'Knee bends' or sitting up and down a few times are of no value and rarely produce any changes in an ECG, unless angina is extremely severe, in which case the effort electrocardiogram is not justified.

Secondly, Dr. Schamroth states that the ECG changes should be observed in at least one praecordial and one bipolar lead and that the changes are best seen in the leads with the tallest R waves. This is by no means always true, as is shown in Fig. 1. In this graph of a 48-year-old man without symptoms, but a family history of coronary artery disease, the only ischaemic changes showed up in V2 and we would suggest that the ECG after exercise should be repeated in V6, V5, V4, and V2. Furthermore, we do not agree that changes in standard lead 1 are usually the most significant of those seen in the standard leads, and we feel, with an experience of over 1,000 effort ECGs, that lead 2 is more likely to show up such changes. We therefore include this lead as a routine.[2]

As regards measuring true and false depression of the ST segment, it has been shown by Robb and Marks[4] that the QX/QT ratio is of little value, and that plain inspection of the tracing for a horizontal or sagging ST segment of any degree is the important change. Furthermore, it does not appear as if junctional depression, that is, with the ST segment sloping up towards the T wave, is of any significance, however much the junction may be depressed below the PQ segment. These cases have the same mortality rate as the normal reactors.[3,4]

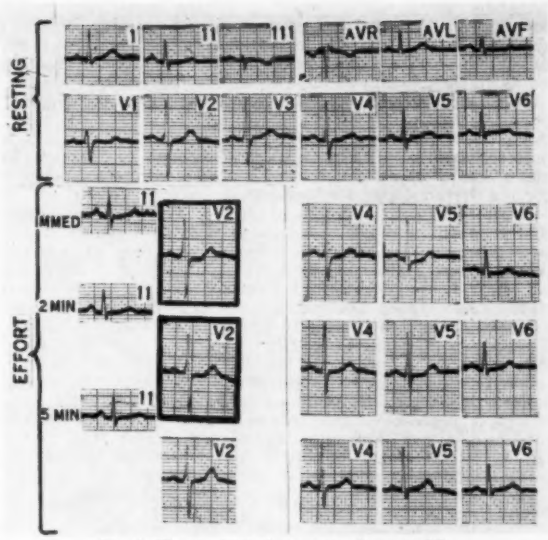

Fig. 1. The maximal changes are shown in V2.

When the test is done, as we described it,[2] a false negative test is extremely rare and almost excludes coronary artery disease if the exercise is adequate.[3-5]

Furthermore, the test is frequently positive when no pain is produced on effort and is always positive when cardiac pain is produced on effort. If pain is produced on effort and there are no ischaemic changes on adequate effort, then the pain is almost certainly not cardiac in origin.

Finally, Dr. Schamroth states that 'if the increase in height (of the T wave) in lead V4 is 5 mm. or more than the resting value, it should be regarded with suspicion and is usually abnormal'. We can state from our experience that if such a T wave is, in fact, abnormal, it is always accompanied by significant ST depression of the ischaemic type, in either the immediate tracing, 2-minute tracing or 5-minute tracing.

Apart from this, we would agree in general with Dr. Schamroth's remarks and would like to congratulate him on an excellent paper.

B. A. Bradlow and M. M. Zion

801, Ingrams Corner
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Johannesburg
20 November 1961

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THE TREATMENT AND PREVENTION OF KWASHIORKOR

To the Editor: Drs. J. C. Simson and N. M. Mann are to be congratulated on their well-conducted clinical trial of 'pronutro'.[1] The manufacturers of this food have also set a good example by their close cooperation with the clinicians in an effort to produce a low-cost, high-protein supplement that would be effective in the prevention of kwashiorkor.

At the risk of being labelled a perfectionist, I feel it should be fully appreciated by those interested in the problems of malnutrition in this country that clinical nutrition trials on severely malnourished children are difficult to interpret. For example, even foods of low-protein content given to such children may cause gain in weight and improvement of general

condition for a while.[2] More prolonged testing on patients involved in normal activities and subject to daily stresses is required to ascertain if such a food is adequate for proper growth and health.[3,4] In addition, metabolic-balance data should be available to confirm clinical impressions.

It is of national importance that protein supplements to prevent kwashiorkor, if recommended by the medical profession, should be as near perfect as possible. Is pronutro in its present stage of development good enough to warrant the claim that it 'should prove to be a valuable protein supplement for the prevention of kwashiorkor in South Africa'?[1]

Examination of the results of the Durban clinical trial[1] show that it was not equal to skimmed milk in rapidity of cure or regeneration of serum-albumin concentration, even though it was fed at a relatively high protein intake (2 G. of protein per lb. body weight per day). Metabolic studies in this department* have shown that part of the reason for this is poor nitrogen absorption (pronutro — 68%, skimmed milk — 80%). This occurs in spite of the better 'appearance' of the stools in the pronutro group. Even if the impaired absorption is ignored on the basis that mothers are impressed by more solid stools, the metabolic studies reveal that the utilization of absorbed protein is defective with pronutro, especially at moderate intakes. For example, at an intake of 1 G. of protein/lb. body weight per day the percentage of nitrogen retained is respectively:

from pronutro	9 - 11%	(15 balances)
from skimmed milk	38%	(11 balances)
from maize porridge	9%	(24 balances)

In other words, at moderate intakes pronutro is no better than maize porridge. When tested at higher intakes the percentage nitrogen retained improves to 23%.

Any recommended protein food should be effective at whatever level of intake it is given so as to cater for vagaries of appetite and income. It has been demonstrated recently that cheap supplemented maize mixtures can be devised that equal the efficiency of skimmed-milk protein as judged by balance studies.[5,6] It would seem highly desirable that this ideal be achieved in the development of pronutro and other commercial foods of a similar nature before they are recommended for general use.

*Department of Child Health and CSIR Clinical Nutrition Research Unit
Medical School
Observatory, CP
24 November 1961

J. D. L. Hansen

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DENTAL ATTENTION BY DOCTORS

To the Editor: On 28 June 1961, Parliament assented to a number of amendments to the Medical, Dental and Pharmacy Act, No. 13 of 1928. These changes are set out in the recently published Medical, Dental and Pharmacy Amendment Act (No. 69 of 1961). Section 5 of this Act reads:

'Section *thirty five* of the principal Act is hereby amended by the substitution in sub-section (3) for the words "other than prosthetic dentistry" of the words "in case of emergency or where no dentist is readily available".'

Here in cold print is the culmination of many years of protracted efforts by the Dental Association, the South African Medical and Dental Council, and interested individuals, to obtain parliamentary — and hence legal — approval of the principle that medical practitioners should not extract teeth, except under circumstances amounting to emergency. Negotiations between the Dental and Medical Associations in 1931 led to a statement being published in the *South African Medical Journal* to the effect that, while the Federal Council of the Medical Association recognized the legal right of medical practitioners to extract teeth, in the interests of equity and the cordial relations which should exist between the medical and dental professions, medical practitioners should refrain from making the extraction of teeth for fees a part of their routine practice where a dentist was available. Publication of this statement seemed to have had little effect, for the Dental Association continued to receive numerous requests for action from its members about the frequent and large-scale extractions by medical practitioners, despite the existence of established dental practices in the same areas.

It is perhaps desirable to place on record the events leading to the amendment of the Act, and to consider some of its implications. The facts are culled from the Report of the Dental Committee of the South African Medical and Dental Council (presented to the Council in open meeting in September 1959), and from the files of the Dental Association.

In June 1959, the Dental Committee of the Council, on a motion proposed by one of its members (Dr. J. F. v. d. S. de Villiers), gave consideration to Section 35 (3) of the Act, concerning the rights of medical practitioners to perform acts pertaining to the practice of dentistry. The Committee noted that a draft Bill to amend Section 35 had been submitted to the Minister of Health by the Council in 1948. The Council was subsequently informed by the Secretary for Health that the Minister was not prepared to introduce the Bill into Parliament. Nevertheless, the Committee agreed to recommend to the Council that a fresh attempt be made, and in September the Council adopted the recommendation of its Dental Committee and submitted to the Minister an amendment reading: 'A medical practitioner shall not perform any act pertaining to the practice of dentistry except in the case of emergency, and where there is no dentist reasonably available'.

The Executive Committee of the Dental Association took note of this at its meeting in January 1960, and wrote to the Minister in support of the Council's resolution, asking him to receive a deputation from the Dental Association. In June the Executive Committee appointed the President of the Dental Association and Prof. C. L. de Jager as members of the deputation and again wrote to the Minister, who thereupon requested the Dental Association to make written submissions on the matter. These were drafted by the President, and sent to the Minister on 27 July. In October the Executive noted a reply from the Minister, over his own signature. He had noted the Dental Association's submissions, and gave his personal assurance that an amendment of Section 35 (3) would be given consideration during the 1961 parliamentary session.

The debates on the amendment in the Senate and the House of Assembly, as reported in Hansard, make interesting reading and the Minister's replies to the debates are illuminating.

While the wording of the amendment, as drafted by the Government legal advisers, differs from that proposed by the Council, it is felt that the effect will be identical. The Section now reads: 'Nothing in this section contained shall be construed as prohibiting a medical practitioner, not registered also as a dentist, from performing in the course of his practice acts pertaining to the practice of dentistry in case of emergency or where no dentist is readily available'. The net effect is that, whereas medical practitioners could perform any dental act (except prosthetic dentistry) without let or hindrance, they are now conditionally debarred from performing such acts.* The amendment also removes the emphasis previously placed on prosthetic dentistry, inferring that it is the most important part of dental practice. In any event, the rights of dentists in this regard are protected in the Dental Mechanicians Act, which prohibits any person (even a medical practitioner), other than a dentist, from supplying or undertaking to supply artificial dentures. Further protection against the performance of other dental acts by medical practitioners is contained in the Medical and Dental Council's Ethical Rule 25, concerning the performance of operations without adequate training.

A. Kessel, B.D.S. (Rand)
Hon. Secretary, Dental Association of South Africa
P.O. Box 5274
Johannesburg
20 November 1961

[* According to the amended Act, a medical practitioner, not registered also as a dentist, may perform acts pertaining to the practice of dentistry in either of the following sets of circumstances: (1) if a patient has a condition requiring emergency dental attention; (2) if a patient requires *any* dental attention and no dentist is readily available — Editor.]